

DLP TV





A Guide to Digital TV

• What is Digital Television?

Digital television (DTV) is a new way of transmitting high quality video and audio to your TV set. Using DTV, broadcasters can transmit high definition TV (HDTV) images, Dolby digital surround audio, and new services such as multicasting (transmitting more than one program on the same TV channel) and datacasting. Several of these services can be combined into a single digital broadcast.

Digital Television Services

• Digital Picture Quality

DTV programs are transmitted in two different formats. The first is Standard Definition Television (SDTV) and the second is High Definition Television (HDTV).

- **SDTV** program formats include 480-line interlaced (480i) and 480-line progressive (480p) video. 480i programs are essentially a digital version of our current analog TV programs, while the 480p format offers improved image detail over 480i. Some 480p programs are broadcast in widescreen and are comparable to progressive-scan DVD movies in image quality.
- **HDTV** program formats include 1080-line interlaced (1080i) and 720-line progressive (720p). Both HDTV formats are always broadcast in widescreen, and offer much higher picture quality than SDTV.

• Dolby Surround Sound

With DTV, you can listen to a variety of Dolby digital audio formats from Dolby Surround 2.0 to Dolby Digital 5.1 surround, using your home audio system. Many HDTV programs are now broadcast with DD 5.1 soundtracks.

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CableCARD and Digital Cable Ready TVs

CableCARD and Digital Cable Ready TVs are the products of a new digital cable standard. This new standard is called OpenCable and it is a concerted effort to standardize the digital cable service network interface in North America. For more information, please refer to www.cablelabs.com.

Digital Cable Ready TVs are equipped with a proper digital cable tuner to receive digital cable signals from your local cable service provider. They are also designed to work with digital cable card modules (PCMCIA card modules called CableCARDs). These PCMCIA card modules or CableCARDs will be provided by your local cable service provider after a proper subscription process.

The provided CableCARD from your local cable service provider needs to be inserted into the CableCARD slot of a Digital Cable Ready TV. Please refer to page 22 for how to insert the CableCARD. A digital set-top box which used to be provided by the cable service provider is no longer needed with Digital Cable Ready TVs and CableCARDs.

When CableCARD is inserted into the slot, the TV screen will show the message that CableCARD is inserted and tries to download necessary data such as channel information or subscription information from your digital cable service provider. When you insert CableCARD for the first time, this process may take a few minutes depending on the amount of data your cable provider needs to send. During this process the digital cable service provider or CableCARD may display messages on the TV screen to help or give you further information.

Please contact your local cable provider for more information on service availability and how to acquire a CableCARD.

NOTE

• This television receiver supports the copy protection system regulated by DTLA (Digital Transmission Licensing Administrator). It should be noted that copy protected content may not be viewable depending on your particular connections.

1. Is the antenna I use for existing TV reception good enough for DTV?

Over-the-air (OTA) digital TV broadcasting uses the same channels as analog TV and works well with many existing TV antennas. However, DTV broadcast channel assignments are different than analog channels. You should find out whether your local DTV broadcasts are on VHF (channels 2-13) or UHF (channels 14-69) to see if you need a different antenna.

If your DTV channels are on UHF and you already get good UHF reception, your present antenna may work fine. The same holds true for VHF DTV reception. Note that in some markets, both VHF and UHF channels are used for DTV broadcasts.

You can find out the latest DTV channel assignments for your area by browsing selected Internet web sites such as www.titantv.com, www.10000watts.com, and www.fcc.gov.

2. How difficult is it to receive DTV signals indoors?

This depends on whether your local DTV stations are running full power or not and how close your location is to the transmission tower. DTV receivers do not require as much signal as analog TV receivers to produce high-quality images and sound.

Once the DTV signal level exceeds a certain threshold at the receiver, the digital video and audio data is decoded at the same quality it was originally encoded for broadcast. This is a big advantage for DTV over analog TV - there is no noise, ghosting, static, or scratchy audio.

3. How can I connect an antenna in my townhouse, co-operative apartment, condominium, or apartment?

The Federal Communications Commission's OTARD Rule (part of the Telecommunications Act of 1996) allows residents of condominiums, townhouse, or members of neighborhood associations to put up outside antennas for reception of broadcast TV signals as long as those antennas are not located in common areas and are no more than 12' in height.

Residents of rental units (apartments, etc.) are not covered by the OTARD rules and will have to use indoor antennas to receive DTV broadcasts. It is possible that the landlord of an apartment complex can provide broadcast DTV signals via a master TV antenna system to each apartment.

4. Can I connect my DTV set-top receiver to my cable TV service?

Cable TV systems use a different method for transmitting digital TV programs that is currently incompatible with broadcast DTV set-top receivers. So you will still need to use an outdoor or indoor antenna to receive OTA broadcast DTV programs.

The good news is that you won't have to pay a monthly or per-program charge to watch OTA DTV and HDTV programs. They're free, unlike subscription satellite TV or premium cable TV. All you need is an antenna and a DTV set-top receiver to enjoy clear, sharp widescreen images and high-quality audio.

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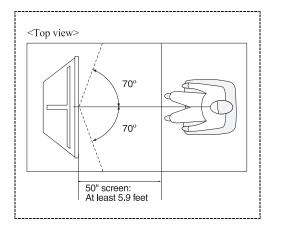


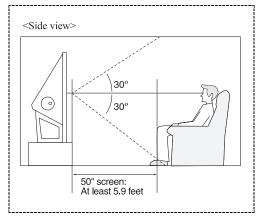
Your New Wide TV

Your New Wide TV

Viewing Position

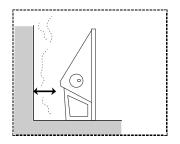
To optimize your viewing comfort, please follow the guidelines below for viewing distance. If viewing for an extended period of time, sit as far back from the screen as possible.





When installing the product, make sure to keep it away from the wall (more than 10cm/4inches) for ventilation purposes.

• Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.



List of Features

Your TV was designed and engineered using the latest technology. It is a full-featured, high-performance unit that exceeds industry standards. In addition, it has these special features:

- Easy-to-operate remote control
- Easy-to-use on-screen menu system you can access from right side buttons or remote control
- Automatic timer to turn the TV on and off at any time you choose
- Adjustable picture and sound settings and the ability to memorize your favorite settings
- Automatic channel tuning for up to 181 channels
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture possible
- A built-in multi-channel sound decoder for stereo and bilingual listening
- Built-in, dual channel speakers
- A special sleep timer
- Picture-in-Picture capability that let you watch two channels at once
- Widescreen TV with adjustable image size
- Life-like clear images provided by DCE technology
- My Color Control Mode for corresponding with your color style
- Color weakness Mode
- Digital Input (HDMI/DVI IN) jack
- Digital Audio Output (OPTICAL) jack
- CableCARD slot

Accessories

Once you have unpacked your TV, check to make sure that you have all the parts shown here. If any piece is missing or broken, call your dealer.



Remote Control (BP59-00100A)/ AAA Batteries



Warranty Card/

Safety Guide Manual/

Quick Guide Manual

0..

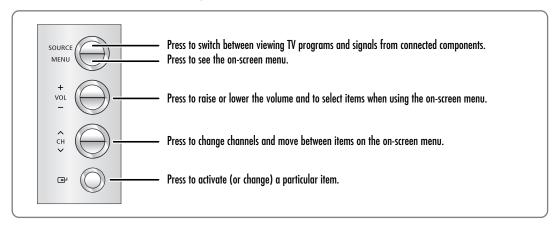


Owner's Instructions

Your New Wide TV

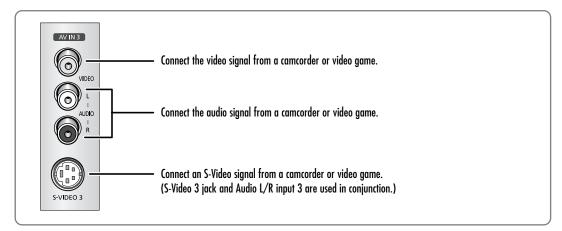
Right side buttons

The buttons on the right side panel control your TV's basic features, including the on-screen menu system. To use the more advanced features, you must use the remote control.



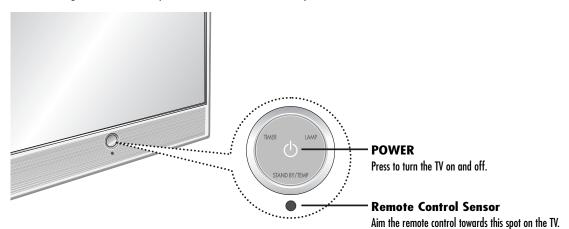
Side Panel Jacks

Use the right side panel jacks to connect a component that is used only occasionally (a camcorder or video game, for example).



Front Panel LED Indicators

The three lights on the front panel indicate the status of your TV.



Indicator Light Key

- : Light is On
- ${\ensuremath{\textcircled{}}}$: Light is Blinking
- \bigcirc : Light is Off

TIMER	LAMP	STAND BY/TEMP	Indication	
0	0	•	Standby state.	
0	•	0	The picture will automatically appear in about 15 seconds.	
•	•	0	Auto Timer ON/OFF has been set and the set will automatically be turned on in about 25 seconds.	
•	0	•	A cooling fan inside the set is not operating normally.	
0	•	•	Lamp cover on the rear of the set is not properly shut.	
0	0	•	Check if the ventilation hole on the rear of the set is blocked, because if the inner temperature is too high, the power will shut off.	
•	•	0	Lamp may be defective. Please contact a certified technician.	

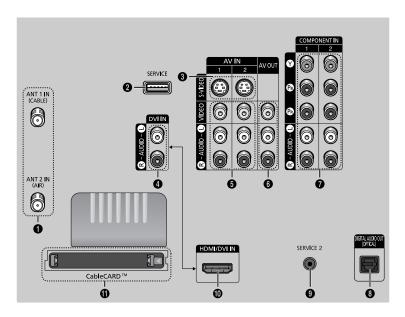
• It takes about 30 seconds for the TV to warm up, so normal brightness may not appear immediately.

• The TV has a fan to keep the inside lamp from overheating. You'll occasionally hear it working.

Your New Wide TV

Rear Panel Jacks

Use the rear panel jacks to connect components such as a VCR. You can connect different components such as VCRs, Set-Top Box and a DVD player etc., because there are two sets of video input jacks and two sets of component video input jacks on the rear panel of your TV. For more information, see "Connections".



O ANTENNA terminals

Two independent cables or antennas can be connected to these terminals. Use "ANT 1 IN (CABLE)" and "ANT 2 IN (AIR)" terminals to receive a signal from VHF/UHF antennas or your cable system. (Refer to pages 18~20)

Ø SERVICE

This jack is for software upgrades.

S-VIDEO INPUT jacks

Connects an S-Video signal from an S-VHS VCR or DVD player. (Refer to page 23)

OVI (Digital Video Interface) AUDIO INPUT jacks Connect to the digital audio output jacks of a device with DVI output. (Refer to page 25)

S VIDEO/AUDIO INPUT jacks

Connect video/audio signals from external sources, such as VCR or DVD players. (Refer to page 24)

VIDEO/AUDIO OUTPUT jacks
 Sonds video (audio cignals from the TV to)

Sends video/audio signals from the TV to an external source, such as a VCR. These jacks are available only in RF, Video and S-Video modes.

COMPONENT1, 2 jacks (Y, PB, PR, L, R) Use these jacks to connect the component video/audio signals from a DVD player or a Set-Top Box. (Refer to pages 24~25)

OIGITAL AUDIO OUT (OPTICAL) jack Connect to a Digital Audio Component. (Refer to page 27)

Ø SERVICE2

This jack is for software upgrades.

HDMI (High Definition Multimedia Interface)/ DVI INPUT jack

Connect to the HDMI jack of a device with HDMI output. These inputs can also be used as a DVI connection with separate analog audio inputs. An optional HDMI/DVI cable will be necessary to make this connection. When using the optional HDMI/DVI adapter, the DVI analog audio inputs on your TV allow you to receive left and right audio from your DVI device. (Refer to pages 25~26)

Insert the CableCARD into the slot. (Refer to page 22)

Remote Control

You can use the remote control up to about 23 feet from the TV. When using the remote control, always point it directly at the TV. You can also use your remote control to operate your VCR, Cable box, DVD player or some Set-top boxes. See pages 36~37 for details.

1. POWER

Turns the TV on and off.

- 2. Number buttons Press to select channels directly on the TV.
- 3. –

Press to select additional channels (digital and analog) being broadcast by the same station. For example, to select channel "54-3", press "54", then press "-" and "3".

- 4. ANTENNA Press to select "Cable" or "Air".
- 5. FAV.CH (Favorite Channel) Press to switch to your favorite channels.

6. MUTE Press to temporarily cut off the sound.

7. MENU Displays the main on-screen menu.

8. VOL -, VOL + Press to decrease or increase the volume.

- 9. INFO Press to display information on the TV screen.
- 10. Mode

Selects a target device to be controlled by the AKAI remote control (i.e., TV, VCR, Cable box or DVD).

11. SET

Used during set up of this remote control, so that it will work compatibly with other devices (VCR, Cable box, DVD, etc.)

12. PRE-CH

Tunes to the previous channel.

13. SLEEP

Press to select a preset time interval for automatic shut off.

14. CH. LIST

Displays the channel list.

15. SOURCE

Each time the button is pressed, all the inputs connected to the external component jacks will be shown in regular sequence.

16. PIP (Picture In Picture)

Displays the available channels in sequence. (These buttons change channels in the PIP window only.)

- 17. CH \land , CH \checkmark Press to change channels.
- 18. ◄/►/▲/▼ Controls the cursor in the menu.
- 19. ENTER While using the on-screen menus, press ENTER to activate (or change) a particular item.
- 20. EXIT Press to exit the menu.
- 21. STILL Press to pause the current screen.
- 22. P.MODE

Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings).

23. P.SIZE

Press to change the picture size.

24. CAPTION

Press to view closed caption information.

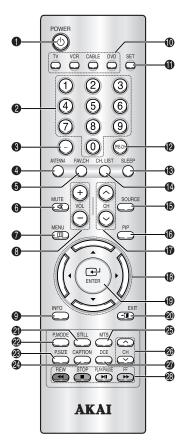
- 25. MTS (Multichannel Television Stereo) Press to choose "Stereo", "Mono" or "SAP (Secondary Audio Program)".
- 26. PIP Controls

CH // : Press to display the available channels in sequence. (These buttons change channels in the PIP window only.)

27. DCE (Digital Color Enhancer) Activates DCE Demo mode.

28. VCR/DVD Controls

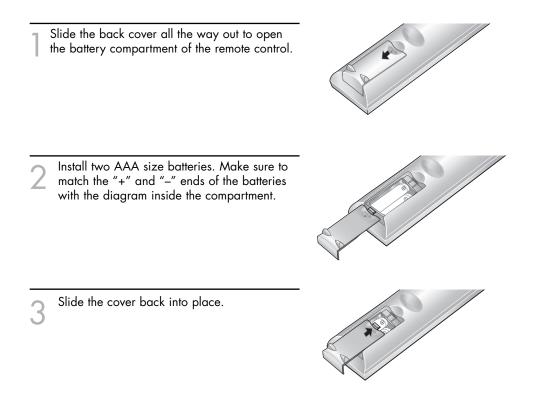
Controls VCR/DVD functions: Rewind, Stop, Play/Pause, Fast Forward.



Your New Wide TV

Installing Batteries in the Remote Control

With normal use, the batteries in the remote control should last about a year. If you notice a performance degradation while using the remote, the batteries may need to be replaced. Make sure you replace both batteries and do not mix old and new batteries in the remote control. If you won't be using the remote control for a long time, remove the batteries and store them in a cool dry place.



NOTE

• Do not mix battery types, i.e, alkaline and manganese.

Connections

Connections

Connecting VHF and UHF Antennas

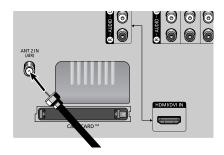
If you do not have a cable system, you will need to connect an antenna to your TV.

Antennas with 75-ohm Round Leads

If your antenna looks like this:

thas 75-ohm round leads.

Plug the antenna lead into the ANT 2 IN (AIR) on the rear panel of your TV.

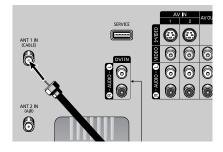


Connecting Cable TV

You can connect different cable systems to your TV, including cable without a Cable box, and cable with a Cable box that descrambles some or all channels.

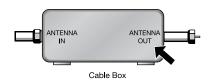
Cable without a Cable Box

Plug the incoming cable into the ANT 1 IN (CABLE) on the rear panel of your TV.

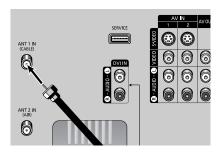


Cable with a Cable Box that Descrambles All Channels

Find the cable connected to the ANTENNA OUT terminal on your Cable box. This terminal might be labeled "ANT OUT", "VHF OUT" or simply "OUT".



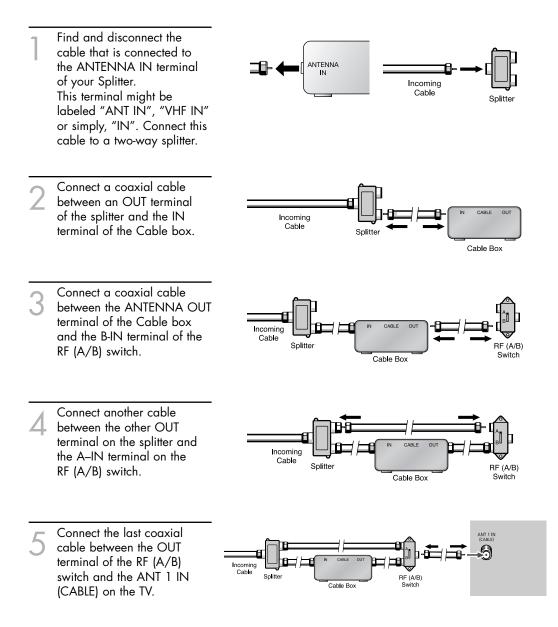
2 Connect the other end of the cable to the "ANT 1 IN (CABLE)" terminal on the rear panel of your TV.



Connections

Cable with a Cable Box that Descrambles Some (But Not All) Channels

To complete this connection you will need a two-way splitter, an RF (A/B) switch, and four coaxial cables (which you can buy from your AKAI dealer or any electronics store).

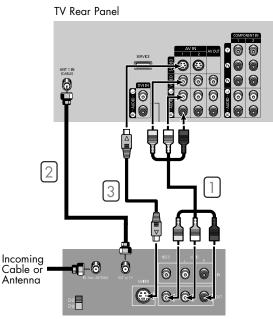


After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B", you will need to tune your Set-Top Box to the Cable box's output channel, which is usually channel 3 or 4.)

Connecting a VCR

Connecting a VCR to the Video or S-Video/Audio jack

- Connect the Video/Audio cables between the VIDEO or S-VIDEO/AUDIO input jacks on the TV and VIDEO or S-VIDEO/AUDIO output jacks on the VCR.
- 2 Connect a coaxial cable between the Antenna out terminal (i.e., "OUT to TV") on the VCR and the ANT 1 IN (CABLE) on the TV.
- 3 Connect a video cable between the S-VIDEO IN jack on the TV and the S-VIDEO OUT jack on the VCR.



Stereo VCR

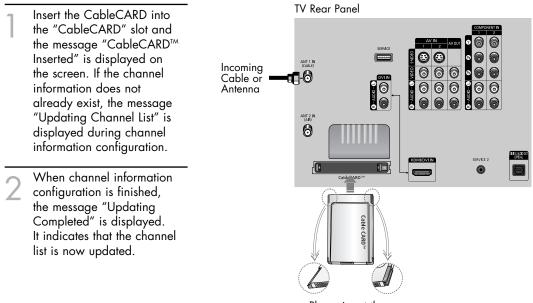
NOTES

- For better video, use an S-Video cable.
- Please be sure to match the color coded input terminals and cable jacks.

Connections

Connecting CableCARD

You must obtain a CableCARD from a local cable service provider.

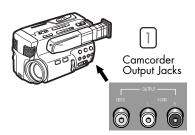


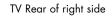
Please insert the card as shown.

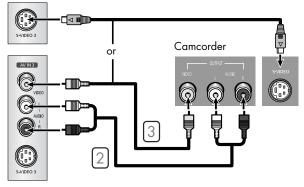
Connecting a Camcorder

The side panel jacks on your TV make it easy to connect a Camcorder to your TV. You can use your camcorder to view tapes without using a VCR.

- Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.
- 2 Connect a set of audio cables between the AUDIO IN jacks on the TV and the AUDIO OUT jacks on the camcorder. If you have a mono Camcorder, connect L(mono) to the Camcorder audio out using only one audio cable.
- 3 Connect a video cable between the VIDEO IN (or S-VIDEO IN) jack on the TV and the VIDEO OUT jack on the Camcorder. The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.) If your Camcorder is stereo, you need to connect a set of two cables.







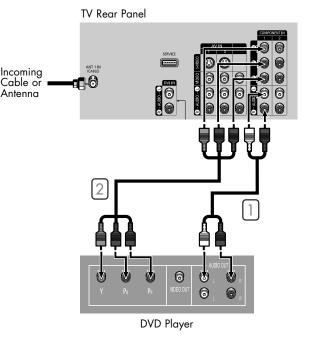
Connections

Connecting a DVD Player

The rear panel jacks on your TV make it easy to connect a DVD player to your TV.

Connecting to Y, PB, PR

- Connect a set of audio cables between the COMPONENT (1 or 2) AUDIO (L, R) IN jacks on the TV and the AUDIO OUT jacks on the DVD player.
- 2 To enable Component video viewing, connect a set of video cables between the COMPONENT (1 or 2) VIDEO (Y, PB, PR) IN jacks on the TV and VIDEO (Y/PB/PR or Y/CB/CR) OUT jacks on the DVD player.



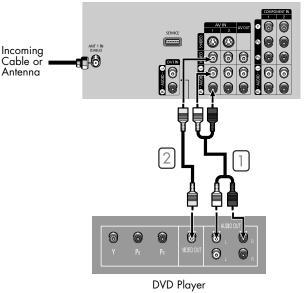
Connecting to Audio and Video Jacks

- Connect a set of audio cables between the AUDIO IN (1 or 2) jacks on the TV and the AUDIO OUT jacks on the DVD player.
- 2 Connect a video cable between the VIDEO IN (1 or 2) jack on the TV and the VIDEO OUT jack on the DVD player.

NOTE

 For an explanation of Component video, see your DVD player's owner's manual.

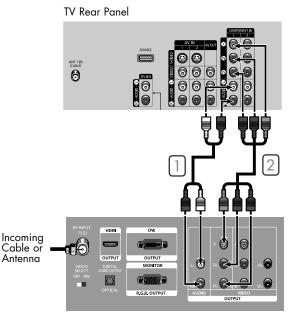




Connecting a DTV Set-Top Box

Connecting to Y, PB, PR

- Connect a set of audio cables between the COMPONENT (1 or 2) AUDIO (L, R) IN jacks on the TV and the AUDIO OUT jacks on the Set-Top Box.
- 2 Connect a set of Component cables between the COMPONENT (1 or 2) VIDEO (Y, PB, PR) IN jacks on the TV and VIDEO (Y/PB/PR or Y/CB/CR) OUT jacks on the Set-Top Box.



DTV Set-Top Box

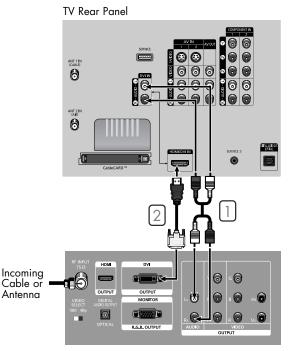
Connecting to DVI (Digital Visual Interface)

Connect a set of audio cables between the DVI AUDIO (L, R) IN jacks on the TV and the AUDIO OUT jacks on the Set-Top Box.

2 Connect an HDMI/DVI cable between the HDMI/DVI IN jack on the TV and the DVI OUT jack on the Set-Top Box.

NOTES

- For an explanation of Component video, see your Set-Top Box owner's manual.
- Requires a Cable Converter.



DTV Set-Top Box

Connecting to HDMI (High Definition Multimedia Interface)

Connect an HDMI cable TV Rear Panel between the HDMI/DVI IN 14.00 jack on the TV and the HDMI HDMI/DVI IN SERVICE 2 ۲ OUT jack on the Set-Top Box. NOTE • Make sure the HDMI/DVI source's power is on, or you . . will be unable to select it in the HDM TV menu's source list. DV Incoming Cable or 0 0 ÷ OUTPUT OUTPUT MONITOR Antenna 0 0 0 0 \odot 0 . 🙆 0 R.G.B. OUTPUT OUTPUT

DTV Set-Top Box

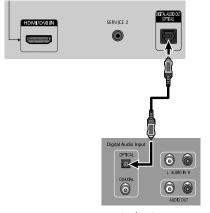
Connecting a Digital Audio System

There are many types of digital audio systems on the market today. A simplified illustration of an audio system is shown below. For more information, see your audio system owner's manual.

If your audio system has an optical digital audio input, connect to the "DIGITAL AUDIO OUT (OPTICAL)" jack on the TV.

NOTE

 OPTICAL: converts the electric signal into an optical light signal, and transmits it through glass fibers. A transmission system of digital audio in the form of a light wave, S/PDIF format using a glass conductor. See page 77 to set the digital output format (Dolby Digital or PCM) appropriate to your digital audio component.



Audio System

Connecting to an Analog Amplifier

The "AV OUT (AUDIO L/R)" terminals cannot be used for external speakers. You must hook them up to an amplifier.

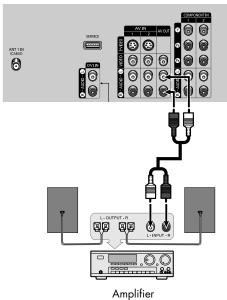
When an audio amplifier is connected to the "AV OUT (AUDIO L/R)" terminals: Decrease the gain (volume) of the audio amplifier, turn the TV's internal mute on and adjust the volume level with the volume control of the amplifier.

NOTE

 If using the HDMI or Component input on the TV, the audio output signal is available only when the TV's Internal Mute is set to on. (Refer to page 78)

TV Rear Panel

TV Rear Panel





Operation

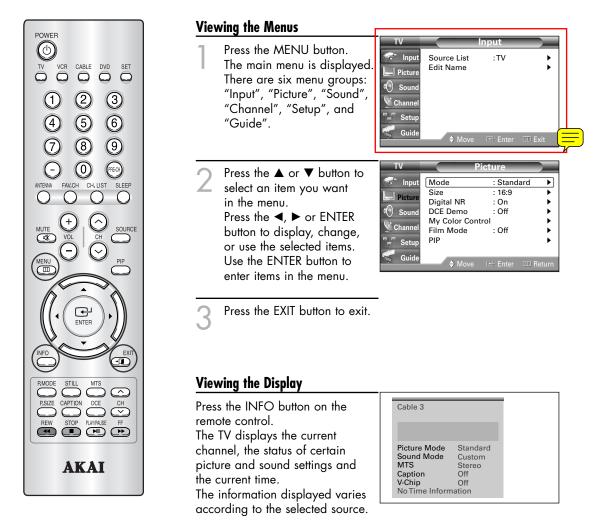
Operation

Turning the TV On and Off

Press the POWER button on the remote control. You can also use the POWER button on the front panel.

Viewing the Menus and On-Screen Displays

The on-screen menu system allows you to control the settings of your TV. Access the on-screen menu system by pressing the MENU button on the remote control. Once the on-screen menu appears, use the $\Delta/\nabla/\langle / \rangle$ /ENTER buttons on your remote control to select menu items and make adjustments. You can also view the on-screen menu system and make some adjustments using the TV's side panel buttons.



Selecting a Menu Language



1	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.	TV Constraints Picture Constraints Channel Channel Channel Chand	Setup Language : English Time > V-Chip > Caption > Menu Transparency : Medium > Blue Screen : Off Color Weakness > ✓ More
2	Press the ENTER button to select "Language". Press the ▲ or ▼ button to select "English", "Español" or "Français", then press the ENTER button.	TV Input Picture Sound Channel Setup Guide	Setup Language English Time Español V-Chip Français Caption Medium Blue Screen : Off Color Weakness ✓ More ♦ Move 🗠 Enter Ill Return
	Press the EXIT button to exit.		

Operation

Memorizing the Channels

Your TV can memorize and store all of the available channels for both "off-air" (antenna) and cable channels. After the available channels are memorized, use the CH \land and CH \checkmark buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).



Selecting the Video Signal Source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna or cable system).

1	Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.	TV Picture Sound Channel Setup Guide	Antenna : Air Auto Program Add/Delete Add/Delete > Favorite Channels > Name > Fine Tune > Signal Strength > LNA : On ♦ Move Image: Enter Image: Return
2	Press the ENTER button to select "Antenna". Press the ▲ or ▼ button to select "Air" or "Cable", then press the ENTER button.	TV Input Picture Sound Channel Setup Guide	Channel Antenna Air Auto Program Cable Add/Delete Cable Favorite Channels Name Fine Tune Signal Strength LNA : Off ♦ Move Enter Image Return
3	Press the ▲ or ▼ button to select "Auto Program", then press the ENTER button.	TV Input Picture Sound Channel Setup Guide	Antenna : Air Auto Program > Add/Delete > Favorite Channels > Name > Fine Tune > Signal Strength > LNA : On ♦ Move

NOTE

 All available DTV and analog channels are automatically stored in memory.

Press the \blacktriangle or \blacktriangledown button to select the Antenna connection, then press the ENTER button.

- Air : "Air" antenna signal Cable : "Cable" antenna signal Air+Cable : "Air" and "Cable" antenna signals
- If the CableCARD is inserted into the "CableCARD" slot on the rear panel, "Cable" and "Air+Cable" are not available.

When selecting Cable TV system: Press the ENTER button to start the auto program. By default, the cable TV system is set to "STD". If you want to select another type of cable system, press the *◄* button and use the \blacktriangle or \blacktriangledown button to select Analog or Digital "STD", "HRC" or "IRC". Press the ENTER button.

TV	Auto Program
 Input Picture Sound Channel Setup Guide 	Select the antennas to memorize. Air Start Cable Start Air+Cable Start
Cuide Cuide	🗢 Move 🖙 Enter 🎟 Return

TV	Auto Program
Input Picture Sound Channel	Select the cable system. Analog STD HRC IRC Digital STD V HRC IRC
🐜 Guide	⇔Move 🖙 Enter 🎟 Return

• STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.

At this point the signal source has been selected.

Press the ► button to select "Start", then press the ENTER button to start the auto program. The TV begins memorizing all available stations. Press the ENTER button at any time to interrupt the memorization process.

Press the EXIT button to exit.

• The TV must be connected to an antenna in order to receive digital TV signals. Even if a particular channel is deleted from the memory, you can always tune to that channel directly by using the number buttons on the remote control.

TV	Auto Program		
 Input Picture Sound Channel Setup 	Select the cable system. Analog STD HRC IRC Digital STD HRC HRC HRC		
😴 Guide	IRC ◆ Move ा Enter I Return		

Auto	Program	
Auto Program in progress		
	Cable Channel 26	
Stop		
E	'Enter 💷 Return	

Operation

Adding and Erasing Channels

You can add channels that were not memorized (or delete unwanted channels from memory).



1	Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.	TV Channel Input Antenna : Air Picture Auto Program Add/Delete Picture Favorite Channels > Channel Favorite Channels > Channel Fine Tune > Setup Signal Strength > LNA : On > Move Enter Return
2	Press the ▲ or ▼ button to select "Add/Delete", then press the ENTER button.	TV Channel Input Antenna : Air Auto Program Add/Delete Picture Add/Delete Guide Favorite Channels Channel Fine Tune Setup Signal Strength LNA : On Move Enter
3	Repeatedly pressing the ENTER button will alternate between add channel and delete channel. Press the CH ∧ or CH ∨ button to switch to the appropriate channel, then repeat above.	Add/Delete Cable 26 Not In Memory Press ENTER to add the channel. Add Move Move Move Add/Delete Cable 26 In Memory Press ENTER to delete the channel.
	Press the EXIT button to exit.	Delete ② Move III Enter IIII Return

Changing Channels

Using the Channel Buttons

Press the CH \land or CH \lor button to change channels.

When you press the CH \wedge or CH \vee button, the TV changes channels in sequence. You will see all the channels that the TV has memorized. (The TV must have memorized at least three channels.) You will not see channels that were either erased or not memorized.

Using the Number Buttons

Use the number buttons to quickly switch to any channel.

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2," then "7." The TV will change channels when you press the second number.

Using the "-" Button

The "-" button is used to select stations that broadcast both a digital and analog signal.



For example, for channel 7-1 DTV Air (digital), press "7", then "-", 7-1 then "1". English Picture Mode Standard Sound Mode MTS Caption V-Chip 12:00 am Standard English On Off For channel 7-2 (analog), press Air 7-2 "7", then "-", then "2". Mono Picture Mode Sound Mode MTS Caption V-Chip 12:00 am Standard Standard Stereo On

Off

NOTE

 HD indicates the TV is receiving a Digital High Definition signal. SD indicates the TV is receiving a Analog standard definition signal.

Using the Previous Channel

Press the PRE-CH button. The TV changes to the last channel you were watching.

Operation

Customizing Your Remote Control

Your TV comes equipped with a universal remote control. In addition to controlling the TV, the universal remote control can also operate a VCR, Cable box and DVD (even if your VCR, Cable box and DVD are made by manufacturers other than AKAI).

NOTE

• The remote control might not be compatible with all DVD Players, VCRs and Cable boxes.



Setting Up Your Remote Control to Operate Your VCR (Cable box or DVD player)

- Turn off your VCR (Cable box or DVD player).
- Press the MODE button to switch the remote control to the VCR (CABLE or DVD) mode.
- The remote control has four modes: TV, VCR, CABLE and DVD.
- On your AKAI remote control, press the Set button.
- 4 Enter 3 digits of the VCR (Cable box or DVD player) code listed on next page for your brand of VCR (Cable box or DVD player). Make sure you enter 3 digits of the code, even if the first digit is a "0". (If more than one code listed, try the first one.)
- Press the POWER button on the remote control. Your VCR (Cable box or DVD player) should turn on. If your VCR (Cable box or DVD player) turns on, your remote control is now set correctly. If your VCR (Cable box or DVD player) does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for the brand of your particular VCR (Cable box or DVD player).
- Once your remote control is set up, press the MODE button any time you want to use the remote to operate your VCR (Cable box or DVD player).

NOTES

- When your remote is in the TV mode, the VCR (or DVD player) control buttons (REW, STOP, PLAY/PAUSE and FF) will still operate your VCR (or DVD player).
- When your remote control is in the VCR, CABLE or DVD mode, the volume buttons still control your TV's volume.

Remote Control Codes



VCR Codes

Admira l	015,088	Hitachi	014,024,044,045	Quasar	017,053
Aiwa	024	Instant Replay	017	Radio Shack	011,015,017,018,021,024,
Akai	026,031,032	JC Penny	011,014,016,017,023,025,		028,036,052,062
Audio Dynamics	022,025		039,044,060,062	RCA	009,014,016,017,037,044,
Bell & Howell	011	JCL	011,017,023,025,039,055	1	046,063,078
Broksonic	019	Kenwood	011,023,025,039,055	Realistic	011,015,017,018,021,024,
Candle	016,018,022,054,055,061	KLH	082		028,036,052,062
Canon	017,062	LG(Go l dstar)	001,002,007,018,023,055,	Samsung	000,016,022, 031,041,051
Citizen	016,018,022,054,055,061	1	069	Sansui	025
Colortyme	023	Lloyd	024	Sanyo	011,021
Craig	016,021	Logik	040	Scott	022,050,058,077
Curtis Mathes	009,016,017,023,024,055,	LXI	024	Sears	011,014,018,021,027,028,
	062,073,076	Magnavox	017,038,062,065	1	044,052,057
Daewoo	003,004,005,006,007,008,	Marantz	011,017,023,025,038,039,	Sharp	015,036,048,054
	022,054,085		055,070	Shintom	026,035,040,064
DB	023,025	MTC	016,024	Signature	024
Dimensia	009	Multitech	016,024,040,041	Sony	026,035,047
Dynatech	024	NEC	011,023,025,039,055,070,	Sylvania	017,024,038,062,065
Electrohome	036	1	073	Symphonic	024
Emerson	017,018,019,022,024,029,	Optimus	015	Tandy	011,024
	032,036,043,050,051,056,	Panasonic	017,062,084,086	Tatung	039
	058,066,071,074,076,077,	Pentax	014,044	Teac	024,039,078
	079	Pentex Research+	055	Technics	017
Fisher	011,021,027,028,052,057,	Philco	017,038,062,065	Teknika	017,018,024,030
	067	Philips	017,038	TMK	076
Funai	024	Pioneer	014,025,042,059	Toshiba	014,022,028,057,058
General Electric	009,016,017,041,062	Portland	053,054,061	Toshiko	018
Go Video	016	PROSCAN	009	Totevision	016,018
Harman Kardon	023	Quartz	011		

Cable Box Codes

Anvision	015,016	Magnavox	015,016,027,029,034,036,	Signature	054
Cable Star	015,016		037,040,041,048,049	Sprucer	035
DaeHan	005	Nawoo	001	Starcom	054
DeaRyung	003	NSC	017	Stargate2000	066
DongKuk	004	Oak	024,046	Sylvania	019,067
Eagle	015,016	Osk Sigma	024	TaePyungYang	002
Eastern International	020	Panasonic	011,035,047,069	Texscan	019,067
General Instrument	054	Philips	015,016,027,029,034,036,	Tocom	025,029,057,058,063
GI	012,013,023,031,032,033,		037,040,041,048,049	Unika	039,040,049
	038,044,075,076,077	Pioneer	026,028,052	Universa	059,060
Hamlin	011,012,020,021,042,056	Randtek	015,016	Viewstar	015,016,027,029,034,036,
Hitachi	045,051,054	RCA	008,035,074	1	037,040,041,048,049
Jerrold	012,013,023,031,032,033,	Rega	011,020,021	Warner Amex	052
	038,044,054,070,073	Regency	010,041	Zenith	022,050,065,069
LG(Go l dstar)	006	Saewoo	007		
Macom	045,051	Samsung	000,011,030,052,071,072		

DVD Codes

Curtis Mathes	009	Philips	007	Sharp	005
JVC	003	PROSCAN	008	Sony	004
LG(Goldstar)	001	RCA	008	Toshiba	002
Panasonic	006	Samsung	000		

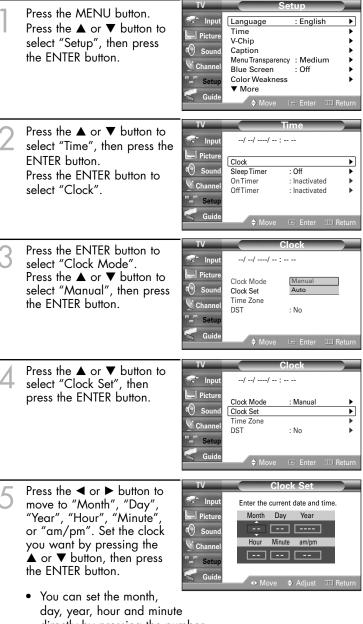
Operation

Setting the Clock

Setting the clock is necessary in order to use the various timer features of the TV. Also, you can check the time while watching the TV. (Just press the INFO button.)



Option 1: Setting the Clock Manually



day, year, hour and minute directly by pressing the number buttons on the remote control.

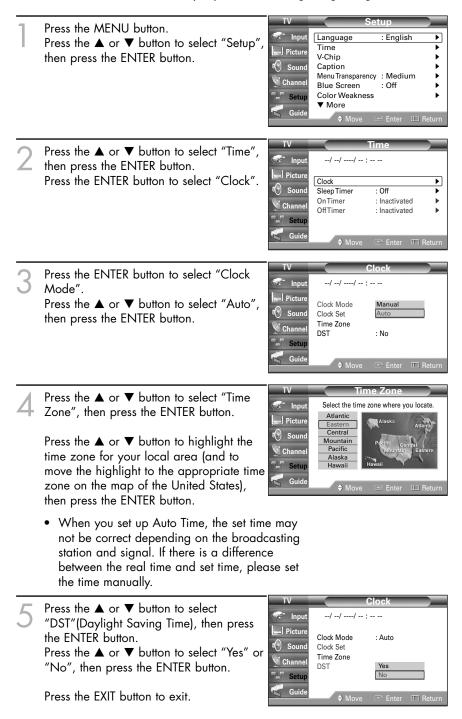
Press the EXIT button to exit.

NOTE

• The current time will appear every time you press the INFO button.

Option 2: Setting the Clock Automatically

The Clock can be set automatically if you are receiving a digital signal.



Operation

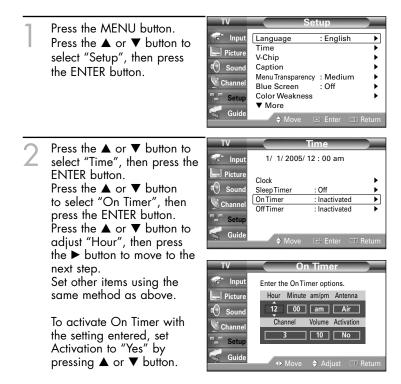
Setting the On/Off Timer



NOTE

Auto Power Off

When you set the timer "On", the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer "On" mode and prevents overheating or leakage, which may occur if a TV is on for too long (when you are on vacation, for example).



• You can set the hour, minute, channel, and volume directly by pressing the number buttons on the remote control.

When finished, press the MENU button to return.

Press the ▲ or ▼ button to select "Off Timer", then press the ENTER button. Press the ▲ or ▼ button to adjust "Hour", then press the ▶ button to move to the next step. Set other items using the same method as above.



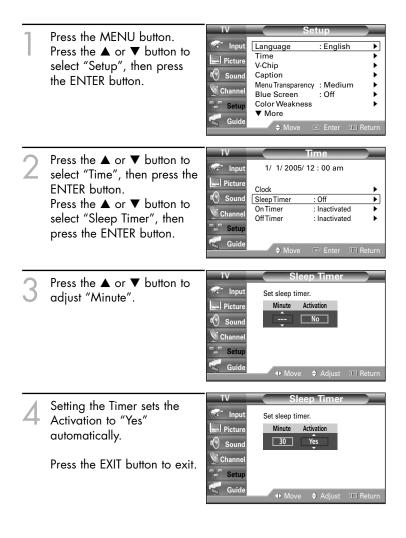
To activate Off Timer with the setting entered, set Activation to "Yes" by pressing ▲ or ▼ button.

When finished, press the EXIT button to exit.

Setting the Sleep Timer

The sleep timer automatically shuts off the TV after a preset time (from 30 to 180 minutes).





Alternate method

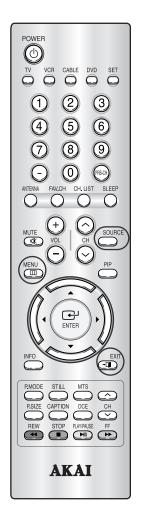
Press the SLEEP button on the remote control repeatedly until the appropriate time interval appears (any of the preset values from "30 min" to "180 min").

the ars Sleep Timer : 90 min

Operation

Viewing an External Signal Source

Use the remote control to switch between viewing signals from connected equipment, such as a VCR, DVD, Set-Top Box or the TV source (broadcast or cable).



Setting the Signal Source

Press the MENU button. 🐔 Input Source List τv Press the ENTER button to Edit Name Picture select "Input". So (\cdot) Chan Guid Press the ENTER button to TV 💣 Input select "Source List". AV1 Pictu AV2 Press the \blacktriangle or \blacktriangledown button to ____ AV3 :(•) ---select a signal source, then S-Video1 ____ S-Video2 press the ENTER button. ____ S-Video3 ____ ▼ More When you connect equipment to the TV, you can choose between the following sets of jacks: "AV1", "AV2", "S-VIDEO1", "S-VIDEO2", "COMPONENT1", "COMPONENT2", or "HDMI/DVI" on the TV's rear panel and "AV3" or "S-VIDEO3" on the TV's side panel. HDMI input can be selected only when the external device is turned on and connected to the TV.

Alternate method

Press the SOURCE button on the remote control repeatedly to select an external signal source.

AV1		

Assigning Names to External Input Mode

This feature enables you to name the input source you have connected.



		_
1	Press the MENU button. Press the ENTER button to select "Input".	TV Input Source List :TV Picture Edit Name ♥ Sound Channel ♥ Setup Setup Guide ♦ Move ● Enter Image: Return
2	Press the ▲ or ▼ button to select "Edit Name", then press the ENTER button.	TV Input Source List :TV Picture Edit Name ♥ Channel ♥ ♥ Guide ♦ Move ● Move Enter
3	Press the ▲ or ▼ button to select a signal source to edit, then press the ENTER button.	Input AV1 : Picture AV2 : O Sound S-Video1 : Channel S-Video2 : S-Video3 : > S-Video1 : > S-Video2 : > S-Video3 : > S-Video3 : > More More >
4	Press the ▲ or ▼ button to select the external device : VCR, DVD, D-VHS, Cable STB, HD STB, Satellite STB, PVR STB, AV Receiver, DVD Receiver, GAME, Camcorder, DVD Combo, DVD HDD Recorder, Internet TV Recv., Interactive TV Recv. VOD (Video On Demand) ST Press the ENTER button. Set other signal sources (AV2, AV3, S-Video1, S-Video2, S-Video3, Component1, Component2, HDMI) using the same	

Press the EXIT button to exit.

method as listed above.



Channel Control

Channel Control

Selecting Your Favorite Channels

You can store your favorite channels for each available input source (such as TV and CATV). This allows you to quickly and easily find frequently watched channels by pressing the FAV.CH button on the remote control.



To Store Your Favorite Channels:

- Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.
- Press the ▲ or ▼ button to select "Favorite Channels", then press the ENTER button. Press the ▲ or ▼ button to select a channel, then press the ENTER button and a check mark will appear. Press the ENTER button again to deselect the selected channel and the check mark will disappear.



nanne

: Air

Press the EXIT button to exit.

NOTES

• Only memorized channels can be set as Favorite channels.

🐨 Input

Pictur

Antenna

Auto Program

- Select All : Press to select all channels.
- Clear All : Press to clear all channels.

To View Your Favorite Channels:

Press the FAV.CH button repeatedly to jump from one favorite channel to another.

Labeling the Channels

Use this feature to assign an easy-to-remember label to analog channels (i.e., "CBS", "ESPN", "PBS2", CNN02", etc.) A label consists of five fields, where each field is a letter, a number or a blank. When the INFO button is pressed, the channel label will appear below to the channel number.



NOTE

 If you add or delete a TV channel, the labeled channels will also be added or deleted. Press the CH \wedge or CH \vee button to tune to the channel that will be labeled. Press the MENU button. Antenna : Air Press the \blacktriangle or \blacktriangledown button to Auto Program Picture Add/Delete select "Channel", then press 🕑 Sound Favorite Channels the ENTER button. Name Char **Fine Tune** Press the \blacktriangle or \blacktriangledown button to Signal Strength Setup select "Name", then press : On LNA the ENTER button. Move Press the \blacktriangle or \blacktriangledown button to move to the channel to be ОК Air 2 🔺 Clear _ Pictur assigned to a new name, Air 3 Clear Soun Air 4 Clear then press the ENTER button. Air 5 Clear Chan Press the \blacktriangle or \blacktriangledown button to Air 6 Clear Setu select a letter, a number or a Guid blank. (Results in this sequence: A...Z, 0...9, +, -, *, /, blank). Press the ► button to switch to the next field, which will ОК Air 2 CNN Clear Pictur be selected. Air 3 Clear 🕑 Soun Air 4 Select a second letter or digit Clear Cha Air 5 Clear

Air 6

Setu

Guid

Clear

♦ Adjust III Retur

Press the EXIT button to exit.

pressing the \triangleleft or \blacktriangleright button,

then press the ENTER button.

pressing \blacktriangle or \blacktriangledown button, as

Repeat the process to select

When you have finished, press the ENTER button. To erase the assigned new name, select "Clear" by

the last three digits.

above.

Channel Control

Fine Tuning Analog Channels Analog

Use fine tuning to manually adjust a particular channel for optimal reception.



-	Press the MENU button.	TV	Channel	
	Press the ▲ or ▼ button to select "Channel", then press the ENTER button.	Channel Channel Channel Channel Channel Channel Channel	Antenna : Cat Auto Program Add/Delete Favorite Channels Name Fine Tune Signal Strength LNA : Off AMOVE Enter	* * * * *
2	Press the ▲ or ▼ button to select "Fine Tune", then press the ENTER button.	TV Input Picture Sound Channel Setup Guide	Channel Antenna : Cat Auto Program Add/Delete Favorite Channels Name Fine Tune Signal Strength LNA : Off ♦ Move I Enter	> > > >
3	Press the ◀ or ► button to adjust the fine tuning.	Cable	Reset	Fine Tuned 3
4	To store the fine tuning setting in the TV's memory, press the ENTER button. To reset the fine tuning setting, press the ▼ button to select "Reset", then press the ENTER button.	Cable	Fine Tune 26 Fine Reset © Save	Tuned 3
5	Press the EXIT button to exit.	Cable	Fine Tune 26 Not Reset	Fine Tuned

NOTE

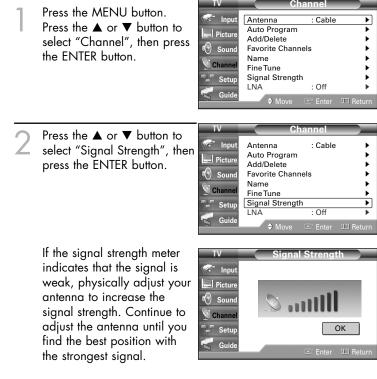
• Only analog TV channels can be fine tuned.

Checking the Digital-Signal Strength Digital

Unlike analog channels, which can vary in reception quality from "snowy" to clear, digital (HDTV) channels have either perfect reception quality or you will not receive them at all. So, unlike analog channels, you cannot fine tune a digital channel.

You can, however, adjust your antenna to improve the reception of available digital channels.





Press the EXIT button to exit.

Channel Control

LNA (Low Noise Amplifier)

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).



1	Press the MENU button. Press the ▲ or ▼ button to select "Channel", then press the ENTER button.	Iv Channel Input Antenna : Air Picture Auto Program Add/Delete Sound Favorite Channels > Channel Fine Tune > Signal Strength LNA : On Guide Move Enter Intervent
2	Press the ▲ or ▼ button to select "LNA", then press the ENTER button.	IV Channel Input Antenna : Air Picture Auto Program Add/Delete Sound Favorite Channels Favorite Channels Channel Fine Tune Fine Tune Setup Signal Strength Move Move Enter Enter
3	Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button.	Input Antenna : Air Picture Auto Program Add/Delete Øisond Favorite Channels Name Fine Tune Öisonal Strength Off Budd Mare Guide Move Enter

Press the EXIT button to exit.

NOTES

- LNA functions only when antenna is set to Air. The settings will be stored separately in each channel.
- If the picture is noisy with the LNA set to On, select Off.
- The LNA setting must be made separately for each channel.

Picture Control

You can select the type of picture which best corresponds to your viewing requirements.



Changing the Picture Standard

	TV Picture
Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.	Input Mode Standard Picture Size : 16:9 Digital NR On Digital NR Channel DCE Demo : Off Channel Film Mode : Off Beture We enter Return
Press the ENTER button again to select "Mode".	INDUt Mode : Standard Picture Contrast 90 Brightness 50 Sound Color Channel Tint Setup Color Tone Setup Color Tone Guide Move Enter Exturn
Press the ENTER button. Press the ▲ or ▼ button to select the desired picture mode (Dynamic, Standard, Movie, Custom), then press the ENTER button.	TV Mode Picture Contrast Picture Brightness O Sharpness Custom Color Tone Warm1 Reset Move Enter Move Warm1
	Press the ▲ or ▼ button to select "Picture", then press the ENTER button. Press the ENTER button again to select "Mode". Press the ENTER button. Press the ▲ or ▼ button to select the desired picture mode (Dynamic, Standard, Movie, Custom), then press

- Choose "Dynamic" for viewing the TV during the day or when there is a bright light in the room.
- Choose "Standard" for the standard factory settings. ٠
- Choose Movie when viewing the movie. ٠
- Choose Custom if you want to adjust the settings according to personal preference (see "Customizing the Picture Settings", page 53).

Customizing the Picture Settings

You can use the on-screen menus to change the "Contrast", "Brightness", "Sharpness", "Color", "Tint", and "Color Tone" according to personal preference. You can select "Standard" which automatically recalls your personalized picture settings.



-	Press the MENU button.	TV Picture
	Press the ▲ or ▼ button to select "Picture", then press the ENTER button.	Input Mode : Standard Picture Size : 16:9 Digital NR : On > O Sound DCE Demo : Off Channel Film Mode : Off PIP > Guide ♦ Move © Enter Im Return
2	Press the ENTER button to select "Mode".	TV Mode Input Mode : Standard Picture Gightness 90 Brightness 50 Sharpness Color 60 Color 60 Tint G 50 R 50 ColorTone :Warm1 Reset Guide \bigstar Move Enter TI Return
3	Press the ENTER button. Press the ▲ or ▼ button to select the desired picture mode (Dynamic, Standard, Movie, Custom), then press the ENTER button.	Input Mode Picture Contrast Sharpness Custom Channel Go Channel Go Guide Atom Movie Atom Color Go Color Go Color Go Color Go Color Color Color Co<
4	Press the ▲ or ▼ button to select a particular option (Contrast, Brightness, Sharpness, Color, or Tint), then press the ENTER button.	Iv Mode Input Mode : Dynamic Picture Contrast 100 Brightness 45 Sharpness 75 Color 65 Tint G 50 ColorTone : Cool1 Reset *
	Press the ◀ or ► button to decrease or increase the value of a particular item.	Guide ↔ Move œ Enter III Return
	• You can also select these options (Contrast, Brightness, Sharpness, Color, or Tint) by	Contrast 90

NOTES

- "Tint" doesn't operate in HDMI or 480p Component or higher modes.
- The Tint cannot be adjusted while watching Digital TV.

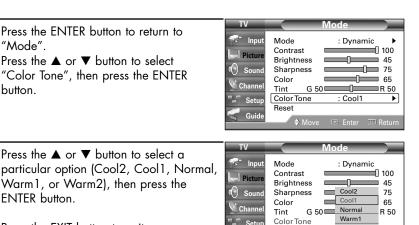
pressing the \blacktriangle or \triangledown button.

Press the ENTER button to return to "Mode".

Press the \blacktriangle or \blacktriangledown button to select "Color Tone", then press the ENTER button.

Press the \blacktriangle or \blacktriangledown button to select a

Warm1, or Warm2), then press the



Warm2

Seti

Guid

Reset

🗢 Mo

Press the EXIT button to exit.

ENTER button.

NOTE

• Color tone is not available in the "Movie" picture mode.

Resetting the Picture Settings to the Factory Defaults

- To return the factory defaults, select "Reset" by pressing the ▲ or ▼ button. Press the ENTER button.
 - The previously adjusted settings will be reset to the factory defaults.

τv	Mode
🐨 Input	Mode : Dynamic 🕨
Picture	Contrast 100 Brightness 45
Sound	Sharpness 75
Channel	Color 65 Tint G 50
- Setup	Color Tone : Cool1
·	Reset
🖏 Guide	🔶 Move 🖙 Enter 🖽 Return

Changing the Picture Size

You can select the picture size which best corresponds to your viewing requirements.



icture Press the MENU button. Mode : Standard Press the \blacktriangle or \blacktriangledown button to Size : 16:9 ► Pictur Digital NR select "Picture", then press : On • Sour DCE Demo : Off the ENTER button. My Color Control ▶ Cha Press the \blacktriangle or \blacktriangledown button to Film Mode : Off PIP select "Size", then press the Setu ENTER button. ♦ Mor Press the \blacktriangleleft or \blacktriangleright button to 🐨 Inpi select the screen format you Picture . want, then press the ENTER 🕑 Sound Zoom1 Zoom2 button. Chan Setu Press the EXIT button to exit. ♦ Mo

Alternate method

Press the P.SIZE button on the remote control repeatedly to select one of the picture size settings.

- "16:9": Sets the picture to 16:9 wide mode.
- "Zoom1": Magnifies the size of the picture on screen.
- "Zoom2": Magnifies the size of the picture more than "Zoom1".
- "4:3": Sets the picture to 4:3 normal mode. This is a standard TV screen size.

NOTES

- You can select only the 16:9 and 4:3 screen sizes in the DTV or Component (720p, 1080i) mode.
- When Double (Ⅲ, Ⅲ) mode has been set in PIP, the Picture Size cannot be set.

Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.



1	Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.	TV Picture Sound Channel Setup Guide	Pict Mode Size Digital NR DCE Demo My Color Control Film Mode PIP	: Standard : 16:9 : On : Off	• • • • • • • • • • • • • • • • • • •
2	Press the ▲ or ▼ button to select "Digital NR", then press the ENTER button.	TV Picture Sound Channel Setup Guide	Mode Size Digital NR DCE Demo My Color Control Film Mode PIP	ture : Standard : 16:9 : On : Off : Off 	<pre></pre>
3	Press the ▲ or ♥ button to select "Off" or "On", then press the ENTER button. Press the EXIT button to exit.	TV Tinput Picture Sound Channel Setup Suide	Pict Mode Size Digital NR DCE Demo My Color Control Film Mode PIP	: Standard : 16:9 Off On	turn

Viewing the DCE Demonstration

This TV includes the DCE function so as to provide a high visual quality. If you set DCE Demo to On, you can view an applied DCE and a normal picture on the screen, for demonstration purposes. Using this function, you can view the difference in the visual quality.

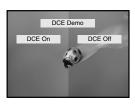


]	Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.	IV Input Picture Sound Channel Setup Guide	Mode Size Digital NR DCE Demo My Color Contro Film Mode PIP	: Off))))) Return
2	Press the ▲ or ▼ button to select "DCE Demo", then press the ENTER button.	TV Input Picture Sound Channel Channel Guide	Mode Size Digital NR DCE Demo My Color Contro Film Mode PIP	: Off	A A
3	Press the ▲ or ▼ button to select "Off" or "On", then press the ENTER button. Press the EXIT button to exit.	TV Input Picture Sound Channel Setup Setup Suide	Mode Size Digital NR DCE Demo My Color Contro Film Mode PIP	: Off	Return

Alternate method

Press the DCE button on the remote control repeatedly to select one of the settings.

- On: Switches on the DCE Demo mode.
- Off: Switches off the DCE Demo mode.



Setting the My Color Control Mode

My Color Control allows you to adjust colors according to your preference, by adjusting skin, sky, and grass tones using the predefined settings ("Blue", "Green", "Pink", "Standard", and "Custom") without affecting other colors on the screen.



NOTE

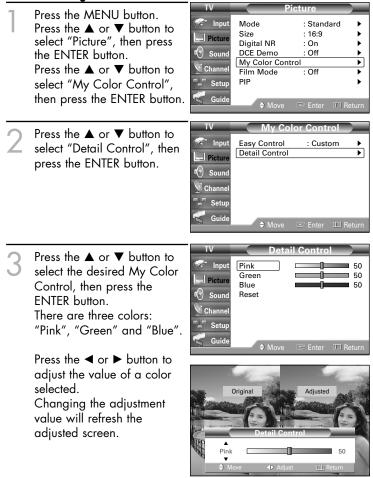
 Changing the settings in the "Detail Control" menu (see next page) will automatically set the My Color Control mode to "Custom".

Using the Easy Control Menu

- Press the MENU button. 🐔 Input Press the \blacktriangle or \blacktriangledown button to select "Picture", then press Mode Standard ۲ : 16:9 Size Pictur Digital NR : On ۲ Sou DCE Demo the ENTER button. : Off My Color Control Film Mode : Off PIP Setu Guide TV Press the \blacktriangle or \blacktriangledown button to 🐨 Input Mode · Standard select "My Color Control", Size : 16:9] Picture Digital NR then press the ENTER button. : On 🕑 Soun DCE Demo : Off My Color Control • 🕯 Channe : Off Film Mode ۲ PIP Setu Guide Press the ENTER button to 🐨 Input Easy Control : Custom ▶ select "Easy Control". Detail Control Picture Press the \blacktriangleleft or \blacktriangleright button to So<u>un</u> select one of the picture 🖣 Channe settings you want. Setu The original picture (before Guid adjustment) is shown on the left side, while the selected mode is shown on the right side. Press the ENTER button to accept the selected mode. Standard Custom Press the EXIT button to exit.
- "Blue": Emphasizes Clear Blues.
- "Green": Emphasizes Mild Greens.
- "Pink": Emphasizes Warm Skin Colors.
- "Standard": Standard Picture.



Custom Settings



Resetting the My Color Control Colors to the Factory Defaults

You can return to the factory default settings for My Color Control colors.

Press the MENU button to display the "Detail Control" menu. Press the ▲ or ▼ button to select "Reset", then press the ENTER button. The previously adjusted My Color Control colors will be reset to the factory defaults.

TV		Detai	l Con	trol		Í
🐨 Input	Pink			0		50
Picture	Green					50
Picture	Blue					50
😯 Sound	Reset					
🕎 Channel						
📲 Setup						
룫 Guide	_	_				_
Sa Clando	\$ N	love	🖭 En	ter	IIII Re	turn

Using the Color Weakness Enhancement Feature

This feature adjusts the Red, Green or Blue color to enhance the picture according to the user's particular color weakness.



1	Press the MENU button.	TV	Setup
	Press the ▲ or ▼ button to select "Setup", then press the ENTER button.	Input Picture Sound Channel Setup Guide	Language : English Time ▶ Time ▶ V-Chip ▶ Caption ▶ Menu Transparency : Medium ▶ Blue Screen : Off Color Weakness ▶ ▼ More ➡ ♠ Move Image: Enter Image: Return
2	Press the ▲ or ▼ button to select "Color Weakness", then press the ENTER button.	TV Input Picture Sound Channel Setup Guide	Setup Language : English Time ▶ Color ▶ Menu Transparency : Medium Blue Screen : Off Color Weakness ▶ ▼ More ♥ More
3	Press the ENTER button to select "Color Weakness". Press the \blacktriangle or \blacktriangledown button to select "On", then press the ENTER button.	TV Carlor The second of the	Color Weakness Color Weakness Red Green Blue On O Blue C Blue C Blue C Blue C Blue
4	Press the ▲ or ▼ button to select a color to be adjusted, then press the ENTER button. Press the ◀ or ► button to adjust the value of a color selected.	TV Carlor Toput Picture Sound Channel Setup Cuide	Color Weakness Color Weakness : On Red 0 Green 0 Blue 0 ♦ Move ⊡ Enter III Return
	 You can also select these options (Red, Green or Blue) by pressing the ▲ or ▼ button. 	A Red ▼ ♦ Move	Color Weakness 0 e ◆ Adjust III Return

Press the EXIT button to exit.

Setting the Film Mode

You can automatically sense and process film signals from all sources and adjust the picture for optimum quality.



1	Press the MENU button. Press the ▲ or ♥ button to select "Picture", then press the ENTER button.	TV Picture Input Mode : Standard Size : 16:9 Digital NR : On O Sound Channel My Color Control Film Mode : Off PIP
2	Press the ▲ or ▼ button to select "Film Mode", then press the ENTER button.	IV Picture Input Mode : Standard Size : 16:9 Digital NR : On O Sound Channel : Off Image: Setup : PIP Guide : Move : Enter
3	Press the ▲ or ▼ button to select "Off" or "On", then press the ENTER button. Press the EXIT button to exit.	IV Picture Input Mode : Standard Size : 16:9 Digital NR : On Oce Demo : Off My Color Control Film Mode Film Mode Off PIP On Guide ♦ Move

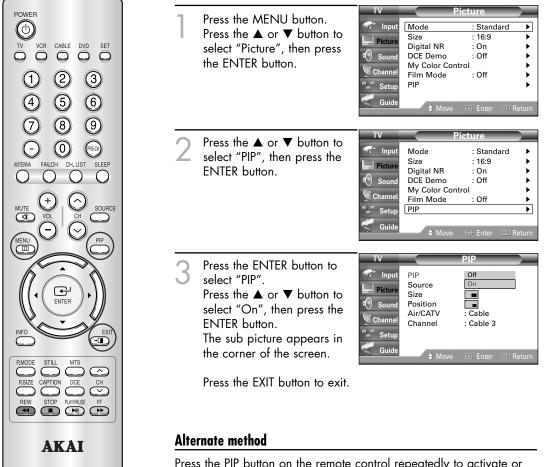
NOTE

• Film mode is supported in 480i only.

Viewing Picture-In-Picture

One of the best features of your TV is the Picture-In-Picture (PIP) feature. The advanced PIP system allows you to watch two different pictures at once, even if you don't have a VCR or DVD connected to your TV.

Activating the PIP



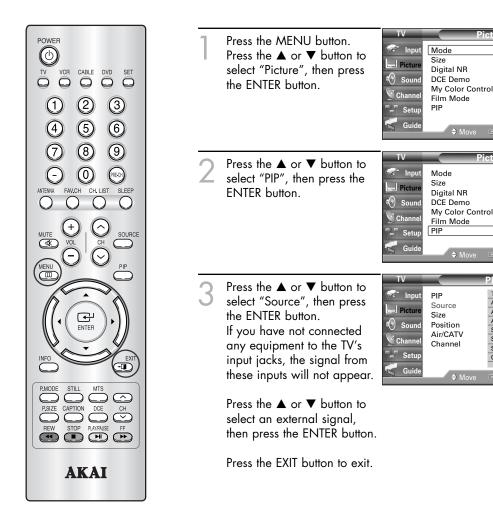
Press the PIP button on the remote control repeatedly to activate or deactivate the PIP.

NOTES

- This feature doesn't function when the "V-Chip" is active.
- If you turn the TV off while watching and turn it on again, then the mode will return to normal video.
- Digital channels cannot be viewed in the PIP window.
- PIP will operate only when the video source for the main picture is digital and the source for the sub picture is analog.

Selecting an External Source

You can use PIP to view a signal from an external source, such as a VCR.



NOTE

• For more information about external signals, see "Viewing an External Signal Source" (See page 42) and the "PIP Settings" (See page 106).

Standard

: 16:9

: On

: Off

: Off

: Standard

: 16:9

: On

: Off

Off

AV1

AV2

AV3

S-Video1

S-Video2

S-Video3

Component1

Size

Mov

Source

🗢 Mo

►

▶

▶

Changing the Size of the Sub (PIP) Picture



1	Press the MENU button.	TV	P	licture	
	Press the ▲ or ▼ button to	fre Input	Mode	: Standard	
- No.		Picture	Size	: 16:9	
	select "Picture", then press	Tioture	Digital NR	: On	
	the ENTER button	🖤 Sound	DCE Demo	: Off	
	THE LIVIER DUIION.	Channel	My Color Con		
		Citamie	Film Mode	: Off	
		Setup	PIP		
		룫 Guide			
		Juice	A Move	🖃 Enter 📖 R	leturn
\mathbf{O}	Press the ▲ or ▼ button to	TV		licture	
		Se Input	Mode	: Standard	
	select "PIP", then press the	Picture	Size	: 16:9	
	ENTER button	Picture	Digital NR	: On	
		Sound	DCE Demo	: Off	
			My Color Con	trol	
		Channel 🕅	Film Mode	: Off	•
		Setup	PIP		
		룫 Guide			
		Touge, Guide	⇒ Move	🖙 Enter 💷 R	leturn
_		TV		PIP	
\mathbf{O}	Press the ▲ or ▼ button to		8:0	<u> </u>	
S	select "Size", then press the	input	PIP	: On	
	ENTER button.	Picture	Source Size	:TV	
			Position		
		😲 Sound	Air/CATV		
	Press the ▲ or ▼ button to	Channel	Channel		
		and the second s	Channel		
	select a size you want, then	Setup			
		룫 Guide			_
	press the ENTER button.	100	♦ Move	🖙 Enter 💷 R	leturn
	Press the EXIT button to exit.				

Changing the Location of the Sub (PIP) Picture



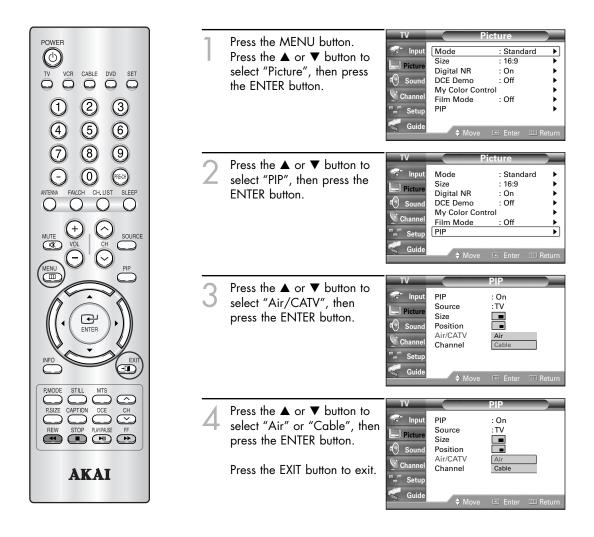
1	Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.	Input Mode Standard Picture Size : 16:9 Digital NR : On > O Sound DCE Demo : Off Channel Film Mode : Off Film Setup • • My color Control • Film Mode : Off • • • • • Move • Enter • Move
2	Press the ▲ or ▼ button to select "PIP", then press the ENTER button.	Input Mode Standard Picture Size : 16:9 Digital NR : On DCE Demo Channel Film Mode : Off Film Mode : Off > Guide • Move : Enter : Return
3	Press the ▲ or ▼ button to select "Position", then press the ENTER button. Press the ▲ or ▼ button to select a position you want, then press the ENTER button.	Input PIP Picture Source Sound Position Position Image: Channel Channel Air/CATV Guide Move Move Enter
	Press the EXIT button to exit.	

NOTE

• The Double (,) mode cannot be selected in Position.

Selecting a Signal Source (Antenna or Cable) for PIP

If the PIP source is TV while PIP is On, you can select a different broadcasting source for the PIP picture from the main picture.



Changing the Channel of the Sub (PIP) Picture

After you set the signal source (antenna or cable) of the sub picture, it is easy to change channels.



1	Press the MENU button. Press the ▲ or ▼ button to select "Picture", then press the ENTER button.	TV Input Picture Sound Channel Fri Setup Guide	P Mode Size Digital NR DCE Demo My Color Com Film Mode PIP	icture : Standard : 16:9 : On : Off trol : Off : Off : Enter □□ Re	
2	Press the ▲ or ▼ button to select "PIP", then press the ENTER button.	TV Carlow Input Picture Sound Channel Channel Chand	P Mode Size Digital NR DCE Demo My Color Com Film Mode PIP	icture : Standard : 16:9 : Off : Off trol : Off : Off : Enter □□ Re	
3	Press the ▲ or ▼ button to select "Channel", then press the ENTER button. Press the ▲ or ▼ button to select a channel you want, then press the ENTER button.	TV Carlor Total Tota	PIP Source Size Position Air/CATV Channel	PIP : On : TV Cable Cable 11 V Enter III Re	eturn
	Press the EXIT button to exit.Air : "Air" antenna signal Cable : "Cable" antenna signal	signal			

Alternate method

Press the CH \land or CH \checkmark button under the cover of the remote control to change the sub picture channels while PIP is on.

Selecting the Sound Source

You can use this feature to hear sound from the main or sub (PIP) picture.



1	Press the MENU button.	TV	Sou	und	_
Pres	Press the ▲ or ▼ button to select "Sound", then press the ENTER button.	Channel Channel	Mode Equalizer Multi-Track Options Auto Volume Internal Mute Digital Output Sound Select Melody	: Custom : Off : Off : Dolby Digital : Main : On ₽ Enter Ⅲ Ret	 <
		ту	C • •		
2	Press the ▲ or ▼ button to select "Sound Select", then press the ENTER button. Press the ▲ or ▼ button to select "Main" or "Sub", then press the ENTER button.	Channel	Mode Equalizer Multi-Track Options Auto Volume Internal Mute Digital Output Sound Select Melody	: Custom : Custom : Off : Off : Dolby Digital Main Sub	turn

Freezing the Picture



Press the STILL button to freeze a moving picture. (Normal sound will still be heard.)

Press again to cancel.

NOTE

• In the PIP mode, the main and sub pictures are stilled at the same time.

Setting the Blue Screen Mode

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".



]	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.	INPUt Language : English Picture V-Chip ↓ Imput Caption ↓ Channel Blue Screen : Off Blue Screen : Off ↓ Guide ✔ More ↓
2	Press the ▲ or ▼ button to select "Blue Screen", then press the ENTER button.	INPUt Language English Picture Time V-Chip Sound Caption Menu Transparency : Medium Channel Blue Screen Off Blue Screen Off V Color Weakness V More Move Enter Return
3	Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button. Press the EXIT button to exit.	Input Language : English Picture V-Chip

Sound Control

Sound Control

Sound Control

You can control and customize the sound levels and settings of the TV with the remote control.



Adjusting the Volume

Press the VOL+ or VOL- button to increase or decrease the volume.

Using the MUTE Button

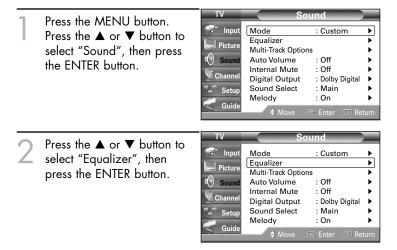
At any time, you can temporarily cut off the sound. Press the MUTE button on the remote control. The message "Mute" is displayed and the sound cuts off.

To turn mute off, press the MUTE button again or press either the VOL+ or VOL- button.

Mute

Customizing the Sound

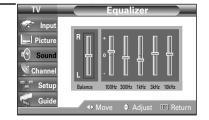
The sound settings can be adjusted to suit your personal preference. (Alternatively, you can use one of the automatic settings. See next page.)



Continued...

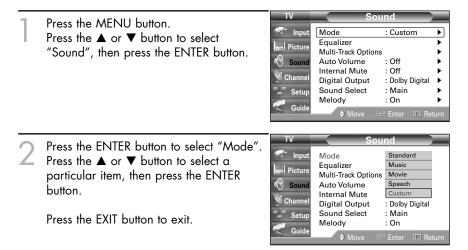
Press the ◄ or ► button to select a particular item to be changed. Press the ▲ or ▼ button to increase or decrease the selected frequency.

Press the EXIT button to exit.



Using Automatic Sound Settings

Your TV has automatic sound settings ("Standard", "Music", "Movie", and "Speech") that are preset at the factory. You can select "Custom", which automatically recalls your personalized sound settings.

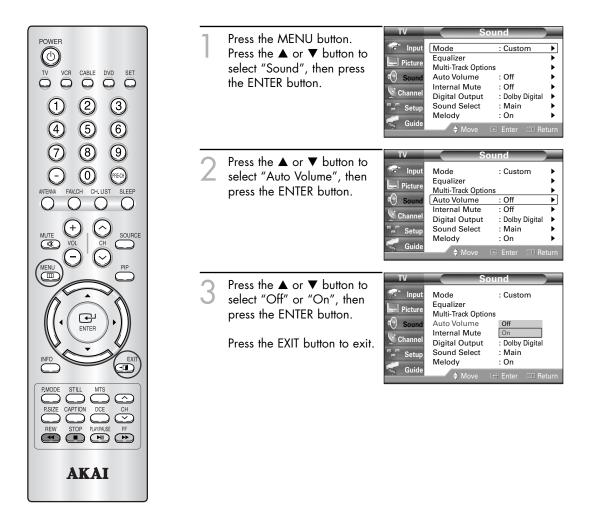


- Choose "Standard" for the standard factory settings.
- Choose "Music" when watching music videos or concerts.
- Choose "Movie" when watching movies.
- Choose "Speech" when watching a show that is mostly dialog (i.e., news).
- Choose "Custom" to recall your personalized settings.

Sound Control

Auto Volume

Each broadcasting station has its own signal conditions, and it is inconvenient to adjust the volume every time the channel is changed. "Auto Volume" automatically adjusts the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.



Choosing a Multi-Channel Sound (MTS) track Digital

The digital-TV transmission system is capable of simultaneous transmission of many audio tracks (for example, simultaneous translations of the program into foreign languages). The availability of these additional "multitracks" depends upon the program.



1	Press the MENU button.	TV	Sol	und	
1	Press the ▲ or ▼ button to select "Sound", then press the ENTER button.	 Input Picture Sound Channel Setup Guide 	Mode Equalizer Multi-Track Options Auto Volume Internal Mute Digital Output Sound Select Melody Move	: Custom : Off : Off : Dolby Digital : Main : On : Enter I Re	*
2	Press the ▲ or ▼ button to select "Multi-Track Options", then press the ENTER button.	TV Carlow Input Picture Sound Channel Channel Chand	Sou Mode Equalizer Multi-Track Options Auto Volume Internal Mute Digital Output Sound Select Melody Move □	Ind : Custom : Off : Off : Dolby Digital : Main : On : On : Enter □□ Re	*
3	Press the ENTER button to select "Preferred Language". Press the ▲ or ▼ button to choose the language (English, Spanish or French) you want, then press the ENTER button.	TV Input Picture Sound Channel Market Setup Suide	Preferred Language Multi-Track Sound	k Options English Spanish French ₽ Enter Ⅲ Re	eturn
	Press the EXIT button to exit.				

Alternate method

Press the MTS button on the remote control. You can listen in a language other than the favorite language by pressing the MTS button.

	1. English	

Sound Control

Choosing a Multi-Channel Sound (MTS) track Analog

Depending on the particular program being broadcast, you can listen to Mono, Stereo or SAP.



1	Press the MENU button. Press the ▲ or ♥ button to select "Sound", then press the ENTER button.	TV Sound Input Mode : Custom Equalizer Multi-Track Options Multi-Track Options Auto Volume : Off Internal Mute : Off Digital Output : Dolby Digital Sound Select : Main Melody : On ♦ Move Enter	+
2	Press the ▲ or ▼ button to select "Multi-Track Options", then press the ENTER button.	TV Sound Input Mode : Custom Equalizer Multi-Track Options Multi-Track Options Auto Volume : Off Internal Mute : Off Digital Output : Dolby Digital Sound Sound Mode : Custom Guide · Move	•
3	Press the ▲ or ▼ button to select "Multi-Track Sound", then press the ENTER button. Press the ▲ or ▼ button to select a setting you want, then press the ENTER button. Press the EXIT button to exit.	Input Preferred Language : English Picture Multi-Track Sound Mono O Sound Stereo Schannel Setup Guide ♦ Move Enter Image: Reference of the setup	eturr
Alte	rnate method		
rem	s the MTS button on the ote control repeatedly to select external signal source.		
		Stereo	

NOTES

- Choose "Mono" for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose "Stereo" for channels that are broadcasting in stereo.
- Choose "SAP" to listen to the Separate Audio Program, which is usually a foreign-language translation.

Choosing a Digital Sound Format Digital

Digital sound can be output from the rear-panel connector on your TV. The digital sound output is an optical connector labeled "Optical Out". After connecting an optical digital-audio component, you must specify the transmission format (Dolby or PCM, as appropriate to your digital audio component). See the owner's manual of your Digital Audio component for further information.



1	Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.	TV Channel Channel Channel Channel Channel Channel Channel Channel	Mode Equalizer Multi-Track Options Auto Volume Internal Mute Digital Output Sound Select Melody ♦ Move ☐	: Custom	
2	Press the ▲ or ▼ button to select "Digital Output", then press the ENTER button. Press the ▲ or ▼ button to select "Dolby Digital" or "PCM", then press the ENTER button. Press the EXIT button to exit.	TV Input Picture Sound Channel Setup Suide	Sou Mode Equalizer Multi-Track Options Auto Volume Internal Mute Digital Output Sound Select Melody Move	: Custom	turn
	DOLBY I T A L				
¦ "C	anufactured under license fror Dolby" and the double-D symb boratories.			Dolby	

Sound Control

Selecting the Internal Mute

When using a device such as a Home Theater or Amplifier with external speakers, you can set Internal Mute to On to cut off sound from the TV's internal speakers.



_	-	TV Sound
]	Press the MENU button. Press the ▲ or ▼ button to select "Sound", then press the ENTER button.	Input Mode : Custom Equalizer Multi-Track Options > Multi-Track Options Auto Volume : Off Channel Internal Mute : Off > Setup Sound Select : Main > Guide • Move :: Enter Iternal Return
2	Press the ▲ or ▼ button to select "Internal Mute", then press the ENTER button.	V Sound Picture Mode : Custom Picture Equalizer > O Sound Auto Volume Off Channel Internal Mute : Off Digital Output : Dolby Digital > Seture Guide • Move : On
3	Press the ▲ or ▼ button to select "On", then press the ENTER button. Pressing the ▲ or ▼ button will alternate between "On" and "Off". Press the EXIT button to exit.	V Sound Picture Mode : Custom Dicture Equalizer Multi-Track Options Mutrack Off Internal Mute Channel Digital Output On Seture Sound Select : Main Melody : On Sound

NOTES

- The VOL +, VOL and Mute buttons do not operate when the Internal Mute is set to On.
- When Internal Mute is on, only the Multi-Track Options and Melody menu are available.

Setting the On/Off Melody

A melody sound can be set to come on when the TV is powered On or Off.



1	Press the MENU button.	TV	So	und	
I	Press the ▲ or ▼ button to select "Sound", then press the ENTER button.	Channel Channel	Mode Equalizer Multi-Track Optior Auto Volume Internal Mute Digital Output Sound Select Melody ♦ Move	: Custom S : Off : Dolby Digital : Main : On : Enter III Re	•
2	Press the ▲ or ▼ button to select "Melody", then press the ENTER button. Press the ▲ or ▼ button to select "On" or "Off", then press the ENTER button. Press the EXIT button to exit.	TV Channel Channel Channel Channel Channel Channel Channel	Mode Equalizer Multi-Track Optior Auto Volume Internal Mute Digital Output Sound Select Melody	und : Custom Is : Off : Off : Dolby Digital Off On 	



Setting the Function Help

Displays Help on the menu functions.



1	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.	V Setup Input Language : English Picture V-Chip > O Sound Caption > Channel Blue Screen : Off Blue Screen : Off > Color Weakness > More >
2	Press the ▲ or ▼ button to select "Function Help", then press the ENTER button.	TV Setup Input ▲ More Picture Function Help : Off CableCARD™ > CableCARD™ Setup > Channel > Setup > Guide > Move Enter Image: Return
3	Press the ▲ or ▼ button to select "On", then press the ENTER button. Press the EXIT button to exit.	V Setup Input ▲ More Picture Function Help Off O Sound CableCARD™ On Channel CableCARD™ Setup Guide ♦ Move Enter Eturn
		Switches the Function Help on.

Menu Transparency Level

Adjusts the transparency of the menu screen.



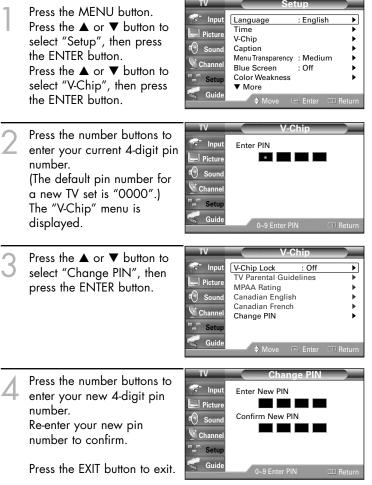
1	Press the MENU button. Press the ▲ or ♥ button to select "Setup", then press the ENTER button.	TV Channel Channel Channel Channel Channel Channel Channel Channel	Language Time V-Chip Caption MenuTransparency Blue Screen Color Weakness ▼ More	: English : Medium : Off	> > > > > Return
2	Press the \blacktriangle or \blacktriangledown button to select "Menu Transparency", then press the ENTER button. Press the \blacktriangle or \blacktriangledown button to select level, then press the ENTER button.	TV Input Picture Sound Channel Setup Guide	Language Time V-Chip Caption Menu Transparency Blue Screen Color Weakness ▼ More	Medium Low Opaque	Return
	Press the EXIT button to exit.				

Using the V-Chip

Access to channels and programs is controlled by a password (i.e., a 4-digit secret code that is defined by the user). The on-screen menu will instruct you to assign a password (you can change it later, if necessary).



How to Change Your Password



NOTES

- The PIP doesn't function when the V-Chip is active.
- If you forget the pin number, press the remote control buttons in the following sequence, which resets the pin to 0-0-0: POWER (Off), MUTE, 8, 2, 4, POWER (On).
- The V-Chip function only works in RF, AV mode and S-Video mode.

How to Enable/Disable the Rating Controls



1	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button. Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button.	TV	Language : English Time + V-Chip + Caption + Menu Transparency : Medium + Blue Screen : Off + Color Weakness + + ✓ More ← Enter Cli Return
2	Press the number buttons to enter your current 4-digit pin number. (The default pin number for a new TV set is "0000".) The "V-Chip" menu is displayed.	TV Input Picture Sound Channel Setup Guide	V-Chip Enter PIN 0-9 Enter PIN Return
3	The "V-Chip" screen will appear. To enable the V-Chip feature, press the ENTER button so that the "V-Chip Lock" field is "On". (Pressing the ▲ or ▼ button will alternate between "On" and "Off".) Press the ENTER button.	TV Carlor Picture Sound Channel Setup Guide	V-Chip V-Chip Lock Off TV Parental Guide On MPAA Rating Canadian English Canadian French Change PIN ♦ Move 🐨 Enter 💷 Return

Press the EXIT button to exit.

How to Set up Restrictions Using the "TV Parental Guidelines"

The parental restrictions can be set up using either of two methods: The "TV Parental Guidelines" or "MPAA Rating".



1	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button. Press the ▲ or ▼ button to select "V-Chip", then press the ENTER button.	Imput Language : English Picture Time V O Sound Caption > Channel Blue Screen : Off Setup Color Weakness > Guide More
2	Press the number buttons to enter your current 4-digit pin number. (The default pin number for a new TV set is "0000".) The "V-Chip" menu is displayed.	TV V-Chip Input Enter PIN Picture Image: Channel Sound Image: Channel Image: Channel Image: Channel Image: Chan
3	Press the ▲ or ▼ button to select "TV Parental Guidelines", then press the ENTER button.	IV V-Chip Imput V-Chip Lock : Off Picture TV Parental Guidelines Impact Arrows MPAA Rating Impact Arrows Canadian English Impact Arrows Canadian French Impact Arrows Canadian French Impact Arrows Change PIN Impact Arrows Move Impact Arrows Move



NOTE

 Allow All : Press to unlock all TV ratings.
 Block All : Press to lock all TV ratings.

Press the EXIT button to exit.

TV-PG : Parent Guidance

TV-MA : Mature Audience

: Young children : Children 7 and over

TV-14 : Viewers 14 and over

: General audience

NOTES

TV-Y

TV-Y7

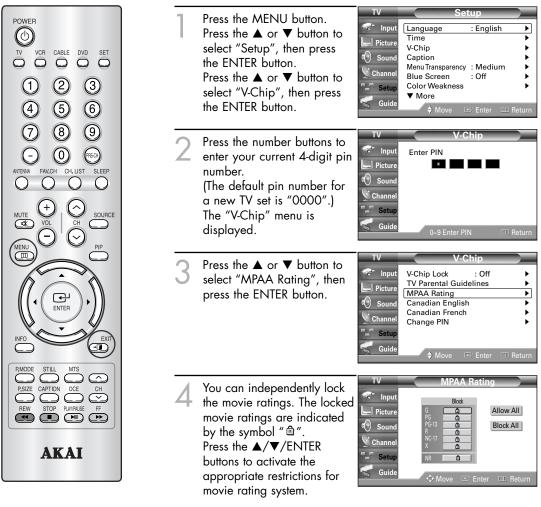
TV-G

- These categories consist of two separate groups: "TV-Y" and "TV-Y7" (young children through age 7), and "TV-G" through "TV-MA" (everybody else).
- The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV parental guidelines must be set up separately for each age group. (See page 89.)

How to Set up Restrictions Using the "MPAA Rating"

The Movie rating system uses the "MPAA" (Motion Picture Association of America) system, and its main application is for movies.

When the rating control is on, the TV will automatically block any programs that are coded with objectionable ratings (either "MPAA Rating" or "TV Parental Guidelines").



Press the EXIT button.

NOTE

• Allow All : Press to unlock all movie ratings. Block All : Press to lock all movie ratings.

Important Notes About Parental Locks

Explanation of the MPAA and TV (FCC) Rating Systems:

TV (FCC) Age-Based Ratings

TV-MA

Mature audiences only. This program may contain mature themes, profane language, graphic violence and explicit sexual content.

TV-14

Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence.

TV-PG

Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialog and situations.

TV-G

General audience. It contains little or no violence, no strong language, and little or no sexual dialog or situations.

TV-Y7

Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of seven.

TV-Y

All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages two – six.

TV (FCC) Content Category

 Violence.

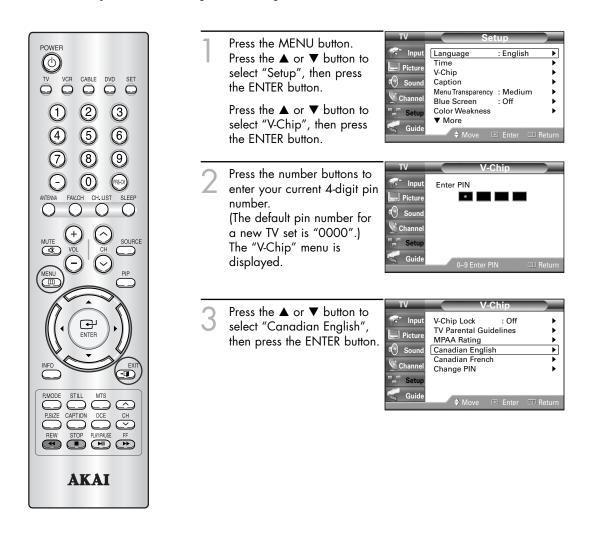
- **S** Sexual content.
- L Offensive language.
- **D** Dialog sexual innuendo.
- **FV** Fantasy or cartoon violence.

MPAA Rating System (Movies)

G	General audience. No restriction.
PG	Children under 13 should be accompanied by an adult.
PG-13	Parental guidance suggested. Children under 13 should be accompanied by an adult.
R	Restricted. Viewers should be 17 or older.
NC-17	Not classified. Viewers should be 17 or older.
X	Adults only.
NR	Not rated.

- TV (FCC) ratings : The particular rating that you have selected will be locked (and indicated as a red "L" on a blue background). Also, all of the age-based ratings will be locked within the particular group (i.e., "group 1" or "group 2"). Suppose that the TV-G rating and all of its contents (V, S, L, and D) are locked. In that case, more restrictive ratings (TV-PG, TV-14, and TV-MA) and all of their contents (V, S, L, and D) are automatically locked as well.
- MPAA ratings : The particular rating that you have selected will be locked. In addition, more restrictive ratings will be locked as well.
- Neither TV (FCC) ratings nor MPAA ratings apply to news programs.

How to Set up Restrictions Using Canadian English



Press the \blacktriangle or \triangledown button to select a appropriate restriction.

Press the ENTER button to activate the restriction selected. The "@" symbol is indicated.

Press the EXIT button.

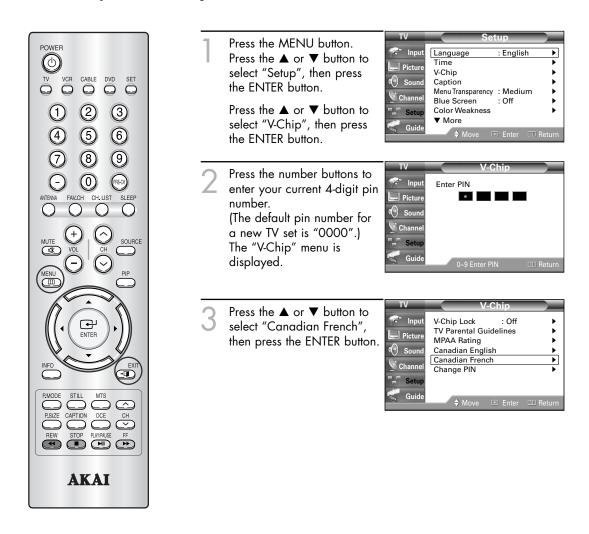


NOTE

 Allow All : Press to unlock all TV ratings.
 Block All : Press to lock all TV ratings.

E	Exempt programming includesnews, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
С	Programming intended for children under age 8.
C8+	Programming generally considered acceptable for children 8 years and over to watch on their own.
G	General programming, suitable for all audiences.
PG	Parental Guidance.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14.
18+	Adult programming.

How to Set up Restrictions Using Canadian French



Press the \blacktriangle or \triangledown button to select a appropriate restriction.

Press the ENTER button to activate the restriction selected. The "@" symbol is indicated.

Press the EXIT button.



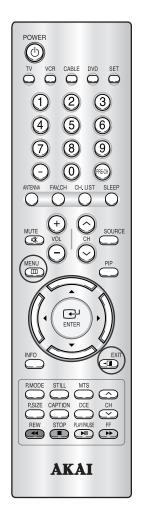
NOTE

 Allow All : Press to unlock all TV ratings.
 Block All : Press to lock all TV ratings.

E		Exempt programming includesnews, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
G		General.
8	ans+	8+ General-Not recommended for young children.
13	ans+	Programming may not be suitable for children under the age of 13.
16	ans+	Programming is not suitable for children under the age of 16.
18	ans+	Programming restricted to adults.

Viewing Closed Captions (On-Screen Text Messages) Analog

The Analog Caption function operates in either analog RF channel mode or external signal mode. (Depending on the broadcasting signal, the Analog Caption function may operate on digital channels.)



1	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.	INPUt Language : English Picture V-Chip V-Chip Sound Caption Menu Transparency : Medium Channel Blue Screen : Off Setup Color Weakness V Soude Move Enter
2	Press the ▲ or ▼ button to select "Caption", then press the ENTER button.	INPUt Language English Picture Time Y-Chip O Sound Caption Caption Channel Blue Screen : Off Blue Screen : Off Y Guide More More
3	Press the ENTER button to select "Caption". Press the ▲ or ▼ button to select "On", then press the ENTER button.	TV Caption Input Caption Off Picture On On Sound Caption Options On Channel Setup Enter Return

Press the ▲ or ▼ button to select "Mode", then press the ENTER button. Press the ▲ or ▼ button to select submenu (CC1~CC4 or Text1~Text4) you want, then press the ENTER button.

Press the EXIT button to exit.

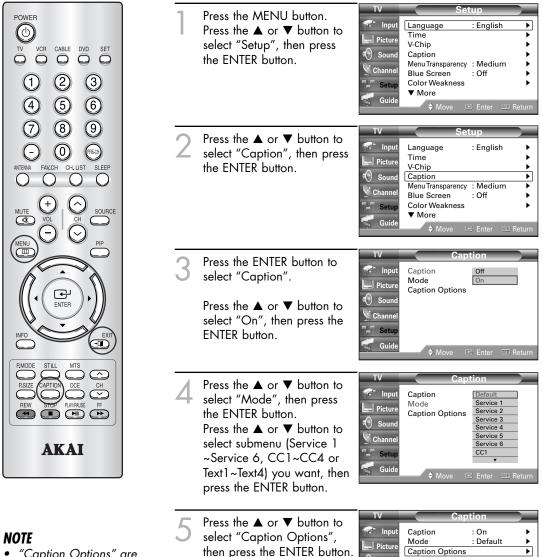
TV	Capt	ion
 Input Picture Sound Channel Setup Guide 	Caption Options	Default CC1 CC2 CC3 CC4 Text1 Text2 Text3 ¥ Enter (III) Return

NOTES

- The default is "CC1".
 - CC1 : The Primary Synchronous Caption Service. These are captions in the primary language that must be in sync with the sound, preferably matched to a specific frame.
 - CC2 : The Special NonSynchronous Use Captions. This channel carries data that is intended to augment information carried in the program.
 - CC3 : Secondary Synchronous Caption Service. Alternate program-related caption data, typically second language captions.
 - CC4 : Special Non-Synchronous Use Captions. Similar to CC2.
 - Text1 : First Text Service. This may be various non-program related data.
 - Text2 : Second Text Service. Additional data, usually not program related.
 - Text3/Text4 : Third and Fourth Text Services. These data channels should be used only if Text1 and Text2 are not sufficient.
- The Caption feature only works in RF, AV and S-Video mode.
- The availability of captions depends on the program being broadcast.

Viewing Closed Captions (On-Screen Text Messages) Digital

The Digital Captions function operates on digital channels.



🕜 Sou

Channe

Guid

 "Caption Options" are available only when "Service1~ Service6" can be selected in "Mode". Press the ▲ or ▼ button to select "Size", then press the ENTER button. Press the ▲ or ▼ button to select one you want, then press the ENTER button. Set other listed options below using the same method as above. Press the EXIT button to exit.

TV	Caption (Options	
Channel	Size Font Style Foreground Color Background Color Foreground Opacity Background Opacity Return to Default	: Default	• • • •
Guide	🗢 Move 🖿	'Enter 💷 I	Return

NOTE

• The availability of captions depends on the program being broadcast.

Size

This option consists of "Default", "Small", "Standard", and "Large". The default is "Standard".

Font Style

This option consists of "Default", "Style0 ~ Style 7". You can change the font you want. The default is "Style 0".

Foreground Color

This option consists of "Default", "White", "Black", "Red", "Green", "Blue", "Yellow", "Magenta", and "Cyan".

You can change the color of the letter. The default is "White".

Background Color

This option consists of "Default", "White", "Black", "Red", "Green", "Blue", "Yellow", "Magenta", and "Cyan". You can change the background color of the caption. The default is "Black".

Foreground Opacity

This option consists of "Default", "Transparent", "Translucent", "Solid", and "Flashing". You can change the opacity of the letter.

Background Opacity

This option consists of "Default", "Transparent", "Translucent", "Solid", and "Flashing". You can change the background opacity of the caption.

Return to Default

This option sets each of "Size", "Font Style", "Foreground Color", "Background Color", "Foreground Opacity", and "Background Opacity" Color to its default.

Alternate method

Press the CAPTION button on the remote control repeatedly to select "On" or "Off".



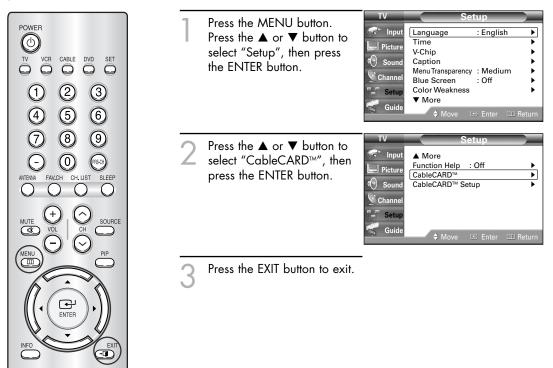
Using the CableCARD

This menu works with a CableCARD provided by a local cable service provider. Prior to accessing this menu, a CableCARD should be connected to the rear panel of the TV.

For detailed connection instructions refer to the "Connecting CableCARD" section on page 22 of this manual.

Displaying CableCARD related information

To access information on Status, Pairing, Network Setup of the CableCARD provided by the service provider in CableCARD menu.



STILL MTS

 \square

DCE CH

AKAI

P.MODE

REW STOP PLAY/PAUSE FF

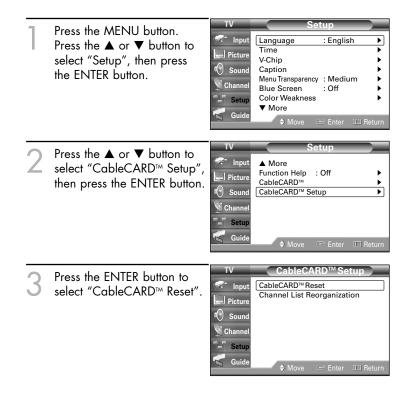
Using the CableCARD Setup Function

Sets up relevant CableCARD options.

CableCARD Reset

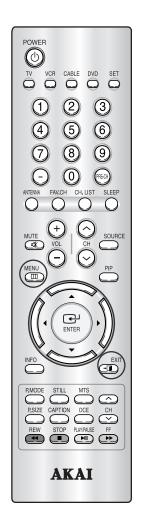
Resets CableCARD when the channels provided by CableCARD are not available.





Channel List Reorganization

Deletes and reorganizes the channel list provided by CableCARD. This feature should be used if you change or upgrade your CableCARD service.

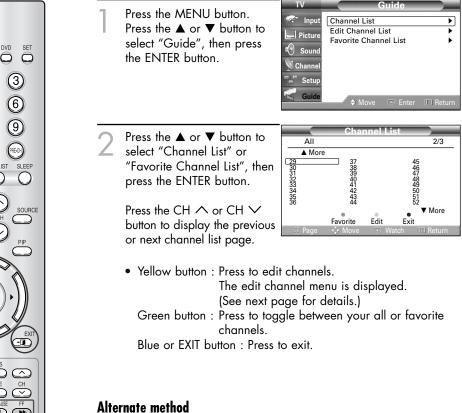


]	Press the MENU button. Press the ▲ or ▼ button to select "Setup", then press the ENTER button.	Input Language : English Picture V-Chip V O Sound Caption Menu Transparency : Medium Channel Blue Screen : Off Blue Screen : Off V Color Weakness V Wore Move :: Enter ::: Return
2	Press the ▲ or ▼ button to select "CableCARD [™] Setup", then press the ENTER button.	INput More Picture Function Help : Off O Sound CableCARD™ CableCARD™ Setup > Setup Guide
3	Press the ENTER button to select "Channel List Reorganization".	TV CableCARD™ Setup Input CableCARD™ Reset Picture Channel List Reorganization Image: Setup Guide Move Enter Builde Move

Using the Guide

You can display a list of all channels or your favorite channels.



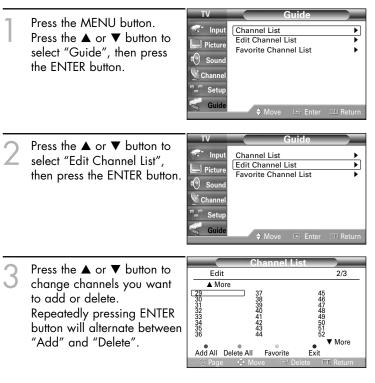


Press the CH.LIST button on the remote control to display a list of channels.



Adding and Erasing Channels





Press the \blacktriangle or \triangledown button to select favorite channel you want to add, then press the yellow button.

The check (✔) mark will appear.

Press the yellow button again to deselect the selected channel and the check (✔) mark will disappear.

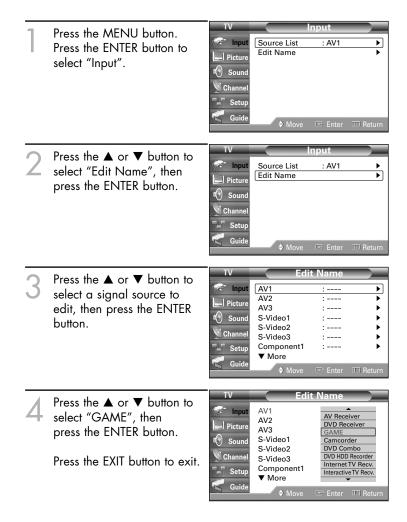
Press the CH \land or CH \checkmark button to display the previous or next channel list page.

• Red button : Press to add all channels of the channel list. Green button : Press to delete all channels of the channel list. Yellow button : Press to add favorite channels. Blue or EXIT button : Press to exit.

Using Game Mode

When connecting to a game console such as PlayStation[™] or Xbox[™], you can enjoy a more realistic gaming experience by selecting Game mode.





NOTES

- Game mode is only available for AV1, AV2, AV3, S-Video1, S-Video2, S-Video3, Component1 and Component2.
- For Component input, Game mode only supports a resolution of 480i.

Restrictions on Game Mode (Caution)

- To Disconnect the game console and connect another external device, cancel Game mode in the Edit name.
- If you display an OSD in Game mode, the screen shakes slightly.



Appendix

Appendix

PIP Settings

- ▲ : PIP operates
- X : PIP doesn't operate

Sub Main	ATSC	QAM	NTSC	AV1	AV2	AV3	S-Video1	S-Video2	S-Video3	Component1	Component2	HDMI
ATSC	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
QAM	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
NTSC			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
AV1			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
AV2			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
AV3			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
S-Video 1			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
S-Video2			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
S-Video3			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Component1			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Component2			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

Replacing the Lamp

• Why do I need to replace the lamp?

The lamp used in a DLP TV has a limited lifespan. For the best screen quality it needs to be replaced periodically. After replacing the lamp, the screen quality will be bright and clear as new.

• When do I need to replace it?

It should be replaced when the screen becomes darker, less clear or when all three LEDs on the front (TIMER, LAMP, & STAND BY/TEMP) are flashing.

• Check before lamp replacement

- 1. The lamp must be the same code number and type.
- 2. The lamp type is indicated on the right side of the TV. It is also indicated on the lamp case.
- 3. After checking the code number for the lamp, give the code number to the store where you purchased the TV or to a AKAI Service center.

Caution

- 1. Replace with the correct code numbered lamp to avoid damage to the TV.
- 2. Turn the power off and wait for 30 minutes before replacing the lamp as it will be hot.
- 3. Do not touch the glass part of the lamp with your bare hands nor insert any foreign object inside the cover as it may cause poor screen quality, electric shock or fire.
- 4. Do not place the old lamp near flammable objects or within the reach of children.
- 5. Be sure to connect this TV directly to an AC wall outlet. If the TV's AC plug is connected to a cable box or other source, it will not allow for proper cool down time.

• For replacement, you will need a 5.91-Inch screwdriver and a pair of gloves.

1	Unplug TV, then use a screwdriver to remove the screws.		
2	Remove the Lamp cover.		
3	Remove the screw securing the Lamp by using a screwdriver.		F
4	Separate the Lamp from the engine by holding the handl and pulling it out.	e ●	
_	To reinstall the lamp follow	—	

To reinstall the Lamp, follow

these steps in reverse order.

NOTES

- Be sure the replacement Lamp is the same type.
- After replacing the lamp, align the lamp cover with the groove and secure the screws.
- The TV will not turn on if the lamp cover is not correctly closed (as this will activate the protective circuit).

Appendix

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, then call your nearest AKAI authorized service center.

Problem	Possible Solution
Poor picture quality.	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality.	Try another channel. Adjust the antenna. Make sure the MUTE button is off.
No picture or sound.	Try another channel. Press the SOURCE button. Make sure the TV is plugged in. Check the antenna connections. Check that the Mute feature is off.
No color, wrong colors or tints.	Make sure the program is broadcasted in color. Adjust the picture settings.
Picture rolls vertically.	Adjust the antenna. Check all wire connections. If you are using a VCR, check the tracking.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it again.
Your remote control does not operate your TV.	Press the MODE button to put your remote control into TV mode. Make sure the remote has batteries.
The TV won't switch on.	Make sure the wall outlet is working. Make sure the TV is plugged in. Make sure the remote has batteries.
Digital broadcasting screen problem.	Please check the digital signal strength and input antenna.

Continued...

Problem	Possible Solution
The visual qualities of digital channels vary.	 The visual qualities of digital channels may vary depending on the original production method (analog or digital). → Classification by the information displayed when switching channels. → If the original production method is digital: High visual quality program. → If the original production method is analog: The digital program displayed on the screen is originally an analog program which has been converted. The visual quality is of an SD grade.
Although the TV caption shows HD, the visual quality is not satisfactory.	The HD caption that appears when switching channels or when pressing the Information button on the remote control means the selected channel is simply a digital channel. If the broadcasting station converts an analog signal into digital and transmits the signal, the visual quality may not be perfect. (Applied to Set Top Box built-in model only.)

• The display panel used for the DLP TV is composed of many tiny pixels. These pixels may occasionally appear on the screen.

Appendix

Cleaning and Maintaining Your TV

With proper care, your TV will give you many years of service. Please follow these guidelines to get the maximum performance from your TV.

Placement

- Do not put the TV near extremely hot, cold, humid or dusty places.
- Do not place the TV near appliances with electric motors that create magnetic fields, such as vacuum cleaners.
- Keep the ventilation openings clear; do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in a vertical position only.

Liquids

• Do not handle liquids near or on the TV. Liquids that spill into it can cause serious damage.

Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.
- This DLP TV projects the image onto a large screen by applying an optical system. If you place the TV set face down, it might cause a problem because dirt, or some other contaminant may become attached to the inside of the TV set.

Temperature

• If your TV is suddenly moved from a cold to a warm place, unplug the power cord, and allow at least two hours for moisture that may have formed inside the unit to dry completely.

Using Your TV in Another Country

If you plan to take your TV with you to a foreign country, please be aware of the different television systems that are in use around the world. A TV designed for one system may not work properly with another system due to differences in the TV channel frequencies.

Specifications

Model	PT50DL14
Voltage	AC 110-120V~
Frequency of Operation	60Hz
Power Consumption	230 watts
Dimensions (W x D x H)	46.45 x 14.15 x 34.25 inches 1182 x 358 x 870 mm
Weight	35.5 Kg / 78.2 lbs

